



# NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

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## MBA PROFESSIONAL REPORT

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**Exploring the Feasibility of a  
Consolidated Joint Civil Augmentation Program (JCAP)**

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Jason D. Kent  
December 2009**

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**EXPLORING THE FEASIBILITY OF A CONSOLIDATED JOINT CIVIL  
AUGMENTATION PROGRAM (JCAP)**

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Submitted in partial fulfillment of the  
requirements for the degree of

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# **EXPLORING THE FEASIBILITY OF A CONSOLIDATED JOINT CIVIL AUGMENTATION PROGRAM (JCAP)**

## **ABSTRACT**

Studies performed by the GAO (1997), Dowling and Feck (1999), and Culkin (2004) suggest that the services, the Government, and the taxpayer may be better served by consolidating the efforts of the separate Civil Augmentation Programs (CAPs) into one, joint program. This study examines five potential efficiency areas—Planning, Capabilities Provided, Financial Processes, Command and Control, and Ease of Use—using Cost Effectiveness Analysis (CEA) to determine the potential cost savings and streamlining that might exist under a Joint Civil Augmentation Program (JCAP).

The results show that significant cost savings will be realized by a JCAP, particularly in the area of Planning. Beyond monetary benefits, having one program standardizes and streamlines Planning, Financial Processes, and Command and Control functions. Standardization and streamlining ultimately increase Ease of Use. Finally, having a single logistics support program eliminates duplicative capabilities, processes, and program management and administration offices while simultaneously bridging existing capability gaps (thus ensuring all military services have access to the full range of support functions).

The study examines three courses of action—Do Nothing, Create a CAP Executive Lead Board (CELB), or Create a JCAP. The examination details the advantages, disadvantages, and cultural barriers/implications of each alternative. The recommendation is to establish a formal JCAP, as soon as practicable.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ACO—Administrative Contracting Officer  
ACRN—Accounting Classification Reference Number  
ACSA—Acquisition and Cross-Servicing Agreement  
A/DACG—Arrival/Departure Airfield Control Group  
AEW—Air Expeditionary Wing  
AF—Air Force  
AFB—Air Force Base  
AFCAP—Air Force Contract Augmentation Program  
AFCESA—Air Force Civil Engineer Support Agency  
AFEB—Award Fee Evaluation Board  
AFRICOM—United States African Command  
AMC—Army Materiel Command  
APS—Aerial Port Squadron  
AO—Area of Operations  
ASC—Army Sustainment Command  
ATC—Air Traffic Control  
BLS—Base Life Support  
BOSS—Base Operating Support Services  
CAO—Contract Administration Office  
CAP—Civil Augmentation Program  
CEA—Cost-Effectiveness Analysis  
CELB—CAP Executive Leadership Board  
CENTCOM—Central Command  
CLSS—Corps Logistics Service Support  
COA—Course of Action  
CONCAP—Construction Capabilities  
CONUS—Continental United States  
COR—Contracting Officer Representative  
COTR—Contracting Officer Technical Representative  
CPAF—Cost Plus Award Fee



CPFF—Cost Plus Fixed Fee  
CPIF—Cost Plus Incentive Fee  
CRS—Congressional Research Service  
DCMA—Defense Contract Management Agency  
DoD—Department of Defense  
DoS—Department of State  
DPAP—Defense Procurement Acquisition Policy  
DS—Direct Support  
DUSD (AT&L)—Deputy Undersecretary of Defense for Acquisition, Technology and Logistics  
FFP—Firm Fixed Price  
FOB—Forward Operating Base  
FPI—Fixed Price Incentive  
FTE—Full Time Equivalent  
GAO—Government Accountability Office  
GCCC—Global Contingency Construction Contract  
GCSC—Global Contingency Services Contract  
GS—General Schedule  
GS—General Support  
GWOT—Global War on Terrorism  
HCN—Host Country National  
HVAC—Heating, Ventilation, and Air Conditioning  
ID/IQ—Indefinite Delivery/Indefinite Quantity  
IGE—Independent Government Estimate  
JARB—Joint Acquisition Review Board  
JAST—Joint Advanced Strike Technology  
JCAP—Joint Civil Augmentation Program  
JCC-I/A—Joint Contracting Command-Iraq/Afghanistan  
JSF—Joint Strike Fighter  
KBRS—Kellogg, Brown, and Root Services  
LOGCAP—Logistics Civil Augmentation Program  
LSO—LOGCAP Support Officer

LSU—LOGCAP Support Unit  
LWG—LOGCAP Working Group  
MACOM—Major Army Command  
MAJCOM—Major Command (Air Force term)  
MHE—Materiel Handling Equipment  
MILCON—Military Construction  
MIPR—Military Interdepartmental Purchase Request  
MOOTW—Military Operations Other Than War  
MWR—Morale, Welfare and Recreation  
NASA—National Aeronautics and Space Administration  
NATO—North Atlantic Treaty Organization  
NAVFAC—Naval Facilities Engineering Command  
O&M—Operations and Maintenance  
OCNUS—Outside the Continental United States  
OPA—Other Procurement, Army  
OPM—Office of Personnel Management  
OSD—Office of the Secretary of Defense  
PA—Property Administrator  
PCO—Procuring Contracting Officer  
PEB—Performance Evaluation Board  
PEO—Program Executive Office  
PM—Program Manager  
PPE—Project Planning Estimate  
Prime BEEF—Prime Base Engineer Emergency Force  
QAE—Quality Assurance Evaluator  
QAR—Quality Assurance Representative  
RED HORSE—Rapid Engineer Deployable Heavy Operational Repair Squadron Engineers  
RFP—Request for Proposals  
RMS—Readiness Management Support, LC  
SOW—Statement of Work  
SWA—Southwest Asia

TB MED—Technical Bulletin (Medical)

T&M—Time and Materials

TO—Task Order

TTM—Theater Transportation Mission

U.S.—United States

USACE—United States Army Corps of Engineers

USAF—United States Air Force

USD (AT&L)—Undersecretary of Defense for Acquisition, Technology and Logistics

WMP—Worldwide Management Plan

WRM—War Reserve Materiel

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## **I. INTRODUCTION**

The purpose of this study is to determine if it is more cost effective and efficient to consolidate the four service-specific civil augmentation programs (CAPs) into a single, joint civil augmentation program, or JCAP. The Army, Navy, and Air Force each manage civil augmentation programs to provide support capabilities during contingencies (Logistics Civil Augmentation Program or LOGCAP for the Army, Global Contingency Construction Contract or GCCC and Global Contingency Services Contract or GCSC for the Navy, and Air Force Contract Augmentation Program or AFCAP for the Air Force). These programs provide services associated with Base Life Support (BLS), the Theater Transportation Mission (TTM), Corps Logistics Service Support (CLSS), and engineering and construction capabilities.

These programs serve as force-multipliers. Contractors are used to “free up” soldiers, sailors, marines, and airmen for combat or humanitarian missions. Contractors are also intended to reduce the logistics footprint in a given contingency theater by consolidating logistical “tails” so that less “beans and bullets” have to be transported to the “tooth” in theater. In other words, these programs serve as logistical focal points; a centralized, streamlined, economical means of supporting the force. Rather than rely on a large network of disparate contractors to supply and support the deployed force, the services employ CAP contractors to streamline support. As noted by Dowling and Feck, “Civil Augmentation contracts afford the services flexibility when limited by the availability of force structure during contingency scenarios. Active duty forces are often constrained by real world requirements or taskings that limit their use, such as response capability to a major regional conflict. At the same time, activation of reserve and guard forces to fulfill needed manpower requirements, in certain scenarios, may be politically sensitive” (Dowling & Feck, 1999, p. 1). Recent military engagements such as Operations ENDURING FREEDOM and IRAQI FREEDOM and natural disasters such as the Indian Ocean tsunami and Hurricane Katrina demonstrate unparalleled reliance on contractor support via CAPs.

## **A. CIVIL AUGMENTATION PROGRAMS**

The military has relied on the use of CAPs to meet its needs (e.g., food service operations, fuel operations, billeting, engineering, and construction) during contingencies and in wartime environments since the Revolutionary War (Nagle, 1999, p. 1). Significant personnel cuts after the Vietnam War coupled with the decision to maintain an all-volunteer force have forced the military to rely on CAPs for support capabilities. As a direct result of manpower limitations, each military service created a CAP to provide service-specific support functions. A brief summary of each program is provided below. To understand the full complexity, an in-depth description of each program is included in Chapter II.

### **1. Logistics Civil Augmentation Program (LOGCAP)**

The Army introduced their first iteration of LOGCAP in 1992 to bridge the capability gaps left by the reduction in support troops following the collapse of the Soviet Union and the end of the Cold War. Although the program has changed contract types and support capabilities, it serves essentially the same purpose today as it did in 1992—support capabilities augmentation. Now in its fourth iteration, LOGCAP IV provides base-life support capabilities (e.g., dining facility operations, laundry services, water production, etc.), Theater Transportation Mission (TTM) capabilities (e.g., scheduling and hauling of supplies and equipment to/from Army Forward Operating Bases, or FOBs), and Corps Logistics Support Services (CLSS) operations (e.g., Class I subsistence, Class III petroleum, Class IV construction material, etc.). LOGCAP has been used in several major operations, including Operations JOINT ENDEAVOR, DESERT SHIELD/STORM, and, most recently, ENDURING FREEDOM and IRAQI FREEDOM.

### **2. Global Contingency Construction Contract (GCCC) and Global Contingency Services Contract (GCSC)**

The Navy's shortfall of capabilities occurs in the area of construction. They awarded their first iteration of CONCAP (predecessor to GCCC and GCSC) in 1995 to provide rapid response to emergent construction needs worldwide. The program's

specific focus was on natural disasters, humanitarian needs and peacekeeping efforts. CONCAP was used for hurricane reconstruction in North Carolina, Virginia, the Caribbean, Florida Keys, Mississippi and, most recently, following Hurricane Katrina in Louisiana. In 2006, the Navy realized they needed to expand their program to provide capabilities such as housing operations, utilities support, and health care support for people affected by natural disasters. As such, they split CONCAP into two separate programs<sup>1</sup>: Global Contingency Construction Contract (GCCC), which essentially operates like CONCAP and focuses on construction; and Global Contingency Services Contract (GCSC), which provides “short term support services incidental to construction” (NAVFAC, 2007, slide 58).

### **3. Air Force Contract Augmentation Program (AFCAP)**

The Air Force’s (AF) shortfall of capability occurs in the areas of Civil Engineering, Services, and Logistics. In 1997, they awarded their first iteration of AFCAP to bridge these capability gaps. AFCAP provides relief and augmentation to AF troops during prolonged sustainment operations. The primary focus of the program is on design and engineering, and infrastructure design and construction; however AFCAP also performs Air Traffic Control (ATC) functions, airfield maintenance functions, and personnel augmentation for specific duties (e.g., War Readiness Materiel, or WRM, maintenance). AFCAP is on its third iteration, AFCAP III, and it has been used in Operations SUSTAIN HOPE, ENDURING FREEDOM, and IRAQI FREEDOM.

## **B. PROBLEM STATEMENT AND RESEARCH QUESTIONS**

The problem statement discusses the need for the study and its relevance to current military operations. The research questions provide an overarching look at the areas addressed in this study. The intent is to answer each research question and provide viable solutions to the issues presented in the problem statement.

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<sup>1</sup> For the purposes of this study, the researchers consider GCCC and GCSC two separate programs. Besides their program offices being geographically distinct, each has a distinct group of administrative personnel.



## **1. Problem Statement**

The purpose of this study is to determine if it is more cost effective and efficient to consolidate the four service-specific civil augmentation programs (CAPs) into a single, joint civil augmentation program, or JCAP. The focus is to reduce areas of duplication while maintaining the ability to accommodate service-unique requirements. The need to increase joint operability coupled with current and future budgetary constraints is forcing the DoD to re-look the structure of several acquisition programs.

The idea to create a Joint CAP (JCAP) was initiated by Mr. Jack Bell, Deputy Undersecretary of Defense for Acquisition, Technology and Logistics (DUSD (AT&L)) in 2006 with a suggested implementation date of 2008. The Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) postponed discussion of the idea in January 2007 in favor of focusing on the contract management and oversight issues being experienced by the Joint Contract Command – Iraq/Afghanistan (JCC-I/A). To date, a complete study of the cost-effectiveness of a JCAP has not been undertaken. Such a study is necessary to determine whether or not it is cost effective to create and maintain one program with multi-award contracts vice four programs with 13 separate contracts.

A General Accounting Office (GAO)<sup>2</sup> report published in 1997 questioned the validity of executing three<sup>3</sup> separate [programs] and stated that it may be more ‘effective and efficient’ if one service acted as the lead executive agent to eliminate duplication of services. (Dowling & Feck, 1999, p. v)

As suggested by the GAO report, there are potential measures of effectiveness (i.e., bridging or satisfying capability gaps that exist within each service’s current CAP) and efficiencies (i.e., streamlining and standardization of process to facilitate ease of program use) to be gained by establishing a JCAP. This study examines possible efficiencies in five main areas: (1) Planning, (2) Capabilities Provided, (3) Financial

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<sup>2</sup> The General Accounting Office legally changed its name to the Government Accountability Office on 7 July 2004. Both names are used in this study respective of the time period of the report and/or quote.

<sup>3</sup> In 1997, only three programs existed: LOGCAP, CONCAP, and AFCAP. Since 2006, four programs have existed: LOGCAP, GCCC, GCSC, and AFCAP.

Processes, (4) Command and Control, and (5) Ease of Use. Examples of each operation/process and their specific study criteria are provided in Table 1.

<b>Potential JCAP Efficiencies</b>	
<b><u>Efficiency Area</u></b>	<b><u>Operation/Process/Criteria</u></b>
Planning	<ul style="list-style-type: none"> <li>• Acquisition Planning and Source Selection</li> <li>• Planning for New Requirements</li> </ul>
Capabilities Provided	<ul style="list-style-type: none"> <li>• Gaps in Capabilities Available</li> <li>• Overlaps in Capabilities Available</li> </ul>
Financial Processes	<ul style="list-style-type: none"> <li>• Funding from Sister Services</li> <li>• Funding from Coalition Partners</li> </ul>
Command & Control	<ul style="list-style-type: none"> <li>• CONUS Program Administration and Oversight</li> <li>• OCONUS Program Administration and Oversight</li> </ul>
Ease of Use	<ul style="list-style-type: none"> <li>• Ability to Understand the Program and its Uses</li> <li>• Cross-Service Utilization of CAPs</li> </ul>

Table 1. Potential JCAP Efficiencies

## 2. Research Questions

Following is the primary research question: “Is it more cost effective for the Army, Navy, and Air Force to combine their individual CAPs into one JCAP?” This question will be addressed by answering the following secondary research questions:

- How is planning affected by a JCAP?
- What efficiencies are gained by combining the support requirements of the individual services into one JCAP? Which areas of duplication can a JCAP eliminate?
- How are financial processes affected by a JCAP?
- How are CONUS program administration and OCONUS program administration and oversight affected by a JCAP?
- How is ease of use affected by using a JCAP vice individual programs? Will one program serve the needs of the combatant commanders better or worse than individual service-specific programs?
- How will different service cultures affect the implementation, utilization, effectiveness, and efficiency of a JCAP?

## **C. PURPOSE**

The purpose of this study is to determine whether a single, consolidated JCAP is more effective and efficient than maintaining separate service-specific programs. For the purposes of this study, effectiveness is defined and measured by the ability and completeness of each of the current CAPs to satisfy the capability gaps that exist within each service (i.e., the Army, Navy, and Air Force). Efficiency is defined and measured by the amount of streamlining and standardization that exists within CAP processes to facilitate ease of program use. This study will balance individual service needs with efficiency prospects. The intent is to provide credible information regarding whether or not to implement a JCAP to DoD Acquisition leaders and key decision makers. Specifically, this study will analyze and address five areas: (1) Planning, (2) Capabilities Provided, (3) Financial Processes, (4) Command and Control, and (5) Ease of Use for both program managers/administrators and users/customers. For this study, emphasis is placed on program use in the Global War on Terrorism (GWOT), since Operations ENDURING FREEDOM and IRAQI FREEDOM are currently placing the highest demand on each program.

## **D. METHODOLOGY**

This inquiry follows the case study methodology (Yin, 2003). A thorough literature review of joint and individual service publications and regulations, Government reports, archival records (e.g., previous CAP contracts), business theories regarding organizational culture and behavior, Web site articles and reports, and scholarly research papers were performed. Data collected from key informants using semi-structured interviews provided expert opinions and insights. Informants include the full range of pertinent players in CAP processes (i.e., Program Managers (PMs), Procuring Contracting Officers (PCOs), Contract Administration Office (CAO) Commanders, Administrative Contracting Officers (ACOs), Quality Assurance Representatives (QARs), and Users/Customers). Using the garnered data, the researchers performed a Cost Effectiveness Analysis (CEA) on each of the five areas of potential efficiencies: (1) Planning, (2) Capabilities Provided, (3) Financial Processes, (4) Command and Control,

and (5) Ease of Use. The researchers also examined the effectiveness of the overall programs at bridging or satisfying service capability gaps.

## **E. SCOPE AND LIMITATIONS**

The scope of the study is intentionally constrained due to time and resource limits; yet it is sufficiently comprehensive to maintain validity. The study focuses on the use of CAPs supporting the U.S. military and coalition partners in military operations (e.g., war and military operations other than war, or MOOTW) outside the continental United States (OCONUS). Currently the majority of CAP capabilities are used OCONUS; therefore, this is the most relevant area to study.

The analysis includes the five main areas previously mentioned: (1) Planning, (2) Capabilities Provided, (3) Financial Processes, (4) Command and Control, and (5) Ease of Use for both program managers/administrators and users/customers. These are the areas that most frequently cause problems during program use (and therefore have the most efficiency to gain) and are the most important concerns of the managers, administrators, and users of CAPs (Joint Publication 4-10, 2008). These areas provide the best cost effectiveness and efficiency information required for senior level decision-making.

It is not possible to interview every person who has had experience with, or who has a stake in each of the CAPs. Therefore, a convenience sample of participants who have extensive CAP experience is drawn. Our intent is to interview as many people with multiple CAP experience as possible in order to better understand the complexities, costs and benefits of using more than one CAP.

Finally, our work is mostly qualitative (i.e., subjective to the extent that it relies on the opinions and insights of expert informants) in nature. We are attempting to explore the basic cost and benefit concepts associated with a JCAP. A quantitative follow-up study is necessary to confirm the findings from this mostly qualitative effort.

## **F. ORGANIZATION**

This report presents the information obtained from our research and analysis in five chapters. Chapter II is a literature review of the Gansler Report, organizational structure and effectiveness literature, organizational culture literature, and an example of joint program management and administration using the Joint Strike Fighter (JSF) program. Chapter III explains the case study methodology, the data collection process and sample procedures, and how Cost-Effectiveness Analysis (CEA) is performed in this study. Chapter IV presents the results of the CEA in the five potential efficiency areas: (1) Planning, (2) Capabilities Provided, (3) Financial Processes, (4) Command and Control, and (5) Ease of Use. Information for the CEA is gleaned from semi-structured interviews with administrators and users of CAPs, from academic research papers about CAPs, and from Government reports. Chapter V provides discussions, conclusions, and recommendations regarding the implementation of a JCAP.

## **G. SUMMARY**

With the problem statement, purpose, and methodology in place, the next chapter, a thorough literature review, provides the reader with background information pertaining to each CAP. Next, contemporary reports and issues, such as the need for acquisition/contracting reform (called for by the Gansler Report) and the successes and challenges of a high-visibility joint program, the Joint Strike Fighter (JSF) program, are presented to familiarize the reader with acquisition information that is topical to this study. The literature review also provides information related to organizational structure, organizational change, and organizational culture, as these elements are critical to the successful implementation of a JCAP, should that course of action be chosen.

## **II. LITERATURE REVIEW**

### **A. INTRODUCTION**

The current CAPs used in contingency theaters are providing logistical support to each of the services and fulfilling needs in combat operations, peacekeeping missions, and humanitarian assistance missions, ranging from Somalia and Haiti to Afghanistan and Iraq. Briefly, the LOGCAP and the AFCAP provide logistical and engineering capabilities that are similar in nature (although the AFCAP is more construction-capable than the LOGCAP). Both programs provide food preparation, laundry, housing, and construction in a contingency environment. The Navy's GCCC is specifically designed to provide contingency construction during and after emergency situations, including natural disaster recovery and humanitarian assistance; and its GCSC provides base support capabilities similar to those of the LOGCAP and the AFCAP.

In order to understand the complexities of each CAP, a detailed examination is performed. This is followed by a brief overview of several theoretical dimensions that apply to this research. Specifically, the researchers examined the Gansler Report, Organizational Structure and Change, Organizational Culture, and the Joint Strike Fighter (JSF) program to better understand the requirement for consolidation, the organizational barriers that may arise, and to get a glimpse of how a successful joint program operates. Using these frameworks, the researchers seek to determine the feasibility and cost effectiveness of consolidating four CAPs into a single JCAP.

### **B. LOGISTICS CIVIL AUGMENTATION PROGRAM (LOGCAP)**

The Logistics Civil Augmentation Program (LOGCAP) "is a U.S. Army initiative for peacetime planning for the use of civilian contractors in wartime and other contingencies to augment U.S. forces in support of Department of Defense (DoD) missions" (Headquarters, Department of the Army, 1985, p. 2). LOGCAP IV is the current iteration of this program. "The types of services that are delivered under the LOGCAP IV include supply operations, such as delivery of food, water, fuel, spare parts, and other items; field operations, such as dining and laundry facilities, housing,

sanitation, waste management, postal services, and Morale, Welfare and Recreation (MWR) activities; and other operations, including engineering and construction, support to communication networks, transportation and cargo services, and facilities maintenance and repair” (Downie, 2008, p. 2). Table 2 provides a more thorough listing of the LOGCAP’s capabilities.

<b>LOGCAP Capabilities</b>		
<b>DS/GS Operations</b>	<b>Field Capabilities</b>	<b>Other Capabilities</b>
Class I (subsistence)	Billeting	Airfield
Class II (clothing and equipment)	Sanitation	Retrograde
Class III (petroleum)	Food Services	Engineering and Construction
Class IV (construction material)	Operations & Maintenance	Power Generation
Class V (ammunition)	Information Operations	Information Technology
Class VI (personal demand items)	Personnel and Admin	Transportation
Class VII (major end items)	Laundry	Maintenance and Motor Pool
Class VIII (medical supplies)	Morale, Welfare and Recreation	Medical Services
Class IX (repair parts)	Mortuary Affairs	Physical Security

Table 2. LOGCAP Capabilities (From LeDoux, 2005)

Operations ENDURING FREEDOM and IRAQI FREEDOM have raised the public’s awareness of the Army’s LOGCAP. The contract, previously awarded solely to Kellogg, Brown and Root Services (KBRS) (formerly a subsidiary of Halliburton), became more publicly scrutinized as the length of the operations became longer and the cost of the cost-type contract, along with subsequent profit potential, became higher.

## 1. LOGCAP: Background and History

The LOGCAP was developed after the U.S. Army’s experience during the Vietnam War. During Vietnam, the Army was forced to rely on civilian contractors because its reserve and guard forces were never activated (Dowling & Feck, 1999). After the Vietnam War, downsizing of the military and the decision to field and maintain an

all-volunteer force forced the Army to consider the use of civilian contractors as a permanent necessity for conducting support operations.

In 1992, the Army awarded its first centrally managed LOGCAP contract through the U.S. Army Corps of Engineers (USACE) to Brown and Root Services Corporation (BRS). The Cost Plus Award Fee (CPAF) Indefinite Delivery/Indefinite Quantity (ID/IQ) contract was awarded for one basic plus four option years (Dowling & Feck, 1999, p. 5). This contract was used in several operations including Operation JOINT ENDEAVOR in Bosnia. It was also used to support United Nations forces in Somalia, Kosovo, Macedonia, Hungary, Saudi Arabia, Rwanda and Haiti.

LOGCAP II, the program's second contract iteration, was awarded in 1997 to DynCorp Aerospace Technology. For this award, procurement and contract administration functions were transferred from the USACE to the Army Materiel Command (AMC). The format of the LOGCAP II was essentially the same as the previous contract. Like its predecessor, the LOGCAP II had one basic plus four option years and was a CPAF contract; however, the LOGCAP II included fixed priced line items for planning efforts (Dowling & Feck, 1999). Planning involved looking at Central Command's (CENTCOM) areas of potential conflict and developing detailed contractor support functions that would be necessary from build up to sustainment. The LOGCAP II contract existed during a fairly quiet time in the Army's history. It served as the follow-on to the original LOGCAP contract; therefore, its main function was to provide sustainment functions in Bosnia. However, DynCorp also supported U.S. forces in the Philippines, Guatemala, Colombia, Ecuador, East Timor, and Panama.

The solicitation and source selection process for the third contract iteration of the LOGCAP, LOGCAP III, began in 2000. The contract was awarded in December 2001, shortly after the September 11 attacks and the decision to deploy U.S. troops against terrorists worldwide. Kellogg, Brown, and Root Services (KBRS) was selected for award. The LOGCAP III contract was awarded as a CPAF contract for a period of one basic plus nine option years. KBRS bid and won with an unconventionally low base fee (1%) and award fee pool (2%); however KBRS was familiar with LOGCAP requirements because they held the first USACE contract (KBRS was previously named Brown and



Root Services Corporation). With its low award fee, KBRS was immediately given the challenge of providing support functions for troops deployed in support of Operation ENDURING FREEDOM. Two years later, they expanded to support troops deployed in support of Operation IRAQI FREEDOM.

In March 2006, the pre-solicitation notice for the LOGCAP IV contract was posted. Although the LOGCAP III contract was only in its fifth option year (with four option years remaining), the Army chose to re-solicit the LOGCAP contract. In its pre-solicitation notice, the Army Sustainment Command (ASC, a newly-minted subordinate command of AMC), declared:

Under this proposed LOGCAP IV acquisition strategy, instead of awarding all LOGCAP planning, support, and program execution worldwide to a single contractor, we intend to award contracts for LOGCAP execution to multiple contractors, with a separate single contract for LOGCAP worldwide and regional planning and program support. (Robacker, 2006, p. 1)

Having a contractor responsible for worldwide and regional planning and program support is a new concept added to the LOGCAP IV contract. The selected contractor performs several functions for ASC, to include developing shelf plans to prepare the program to deploy to a new area if necessary (e.g., preparing plans for operations in Iran if they became necessary). The support contractor provides administration functions for the PEO, both CONUS and OCONUS.

As stated by the U.S. Army news release for the LOGCAP IV award, “The three performance contractors will compete for individual LOGCAP task orders<sup>4</sup> (TOs), creating a competitive environment meant to control costs and enhance quality” (Downie, 2008, p. 1). Use of a multiple-award logistics umbrella contract proved successful to the AFCAP when they awarded their third contract iteration to six companies in November 2005. This notion is detailed further in the AFCAP background section of this chapter. Multiple-award contracts ease political and taxpayer concerns that one company is capitalizing on the major logistical efforts of two wars (colloquially known as “war

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<sup>4</sup> A task order (TO) is an order for services placed against an established contract or with Government sources.

profiteering”), as each company must compete for individual TOs written under the umbrella contract. This perpetual competition usually results in increased quality and better performance by all contractors since each company’s next TO bid will be evaluated using past performance information garnered from their previous TO performance. Additionally, multiple-award contracts broaden the base of contractors who understand and are capable of meeting, in this case, the Army’s contingency needs. As such, the program is able to handle a rapidly increasing scope of operation faster than if a single contract is awarded to a single contractor.

The planning and support contract for the LOGCAP IV was awarded on 16 February 2007 to Serco, Inc. The execution contracts of the LOGCAP IV were originally awarded on 27 June 2007 to Kellogg, Brown, and Root Services, Inc. (KBRS), DynCorp International, LLC, and Fluor Intercontinental, Inc; however, protests were issued by two unsuccessful offerors alleging that the bids were evaluated improperly by ASC. They "argued that the agency's evaluation of proposals was unreasonable" (Hedgpeth, 2007, p. 1). The Government Accountability Office (GAO) sustained the protests on 5 October 2007 and recommended the Army “go back to the stage of negotiations...We're recommending they reopen discussions and then request revised proposals from all companies and evaluate those proposals and then make a new decision of who should get the contract” (Hedgpeth, 2007, p. 1). After the Army reevaluated the proposals, they were permitted to proceed with the award of the three LOGCAP IV execution contracts. Formal contract awards were made to the original three awardees on 17 April 2008.

Unlike previous iterations of the contract, the LOGCAP IV contracts allow the Army flexibility to award CPAF, Cost Plus Fixed Fee (CPFF), Cost Plus Incentive Fee (CPIF), Cost, Firm Fixed Price (FFP), Fixed Price Incentive (FPI), or Time and Materials (T&M) TOs to match the requirement. The planning and support (Serco, Inc.) and execution (KBRS, DynCorp International, LLC, and Fluor Intercontinental, Inc.) functions were awarded with different contract durations. For the planning and support contract, the period consists of one basic plus four option years. The contract has a minimum order amount of \$613,677.60 and a maximum value of \$45 million dollars per year; making the full contract implementation value, a maximum of \$225 million. Like

the LOGCAP III contract, the time period for the LOGCAP IV execution contracts consists of one basic year plus nine option years. These contracts have no minimum dollar values; however, each contract is guaranteed that, at a minimum, they can establish a core program office (HQ Army Sustainment Command, 2006). The maximum dollar value allowed per execution contractor is \$5 billion per year, making the maximum annual execution program value \$15 billion per year, and the total contract value \$150 billion (U.S. Army Sustainment Command, 2008).

The Defense Contract Management Agency (DCMA) performs contract administration of the LOGCAP IV contracts. DCMA provides Administrative Contracting Officers (ACOs), Quality Assurance Representatives (QARs), and Property Administrators (PAs) to manage the day-to-day operations of the LOGCAP IV contractors. Additionally, the LOGCAP Support Unit (LSU) acts as forward-deployed representatives of the ASC to assist customers (e.g., 82nd Airborne Division Staff) in defining requirements and developing Statements of Work (SOWs) for inclusion into the LOGCAP TOs that serve their Forward Operating Bases (FOBs). The DCMA and the LSU serve as liaisons to the supported Command for LOGCAP functions.

## **2. Operational Use**

The LOGCAP is primarily designed for use in areas where no bilateral or multilateral agreements or treaties exist; in other words a contingency situation where the U.S. military has the task of providing their own logistical support (i.e., full support is not provided by the host nation or an organization such as the North Atlantic Treaty Organization (NATO)). “LOGCAP may also be used to provide additional support in areas with formal Host Nation Support agreements. LOGCAP support can exist in conjunction with other contractor support agreements, and is available during Continental United States (CONUS) mobilizations to assist the Outside Continental United States (OCONUS) support base to help units prepare for worldwide contingencies” (Headquarters, Department of the Army, 1985, p. 3).

The LOGCAP is considered the contract support option of last resort because of the potential additional costs associated with high risk, cost-type contracts. “LOGCAP [is] primarily designed for areas where emerging requirements are the norm, rapid response is required, and/or conditions are such that normal sustainment type contracts are not competitively available” (Special Inspector General for Iraq Reconstruction, 2007, p. 26). Although the LOGCAP is most commonly thought of, and used in contingency environments, it is not solely a contingency program. Aspects of the support contractor’s contract call for the contractor to prepare “shelf” plans for providing logistical support in potential contingencies. The program also allows the logistical vehicle to be used in homeland emergencies and military exercises.

### **C. GLOBAL CONTINGENCY CONSTRUCTION CONTRACT (GCCC) AND GLOBAL CONTINGENCY SERVICES CONTRACT (GCSC)**

The U.S. Navy’s CAPs are called the Global Contingency Construction Contract (GCCC) and the Global Contingency Services Contract (GCSC). GCCC was formerly known as the Construction Capabilities (CONCAP) contract. The purpose of GCCC is to “have a contractor available before an exigent situation develops, with a goal of early mobilization and startup construction. Required services include program planning, scheduling, design, engineering, transportation, construction management and quality control. The contractors will provide the personnel, equipment, materials, labor, travel, and everything needed to give the Navy a quick response for civilian construction contract capability” (Naval Facilities Engineering Command, p. 1). GCSC was developed after the Navy’s experience with Hurricane Katrina. They realized their construction-centric CONCAP/GCCC programs could not field some basic life support functions (e.g., personnel beddown, dining facility operations, laundry operations, etc.) because these functions were out of the contract’s scope, so, in 2006, they awarded a new base support service program, GCSC, to bridge the capability gap.

#### **1. GCCC/GCSC: Background and History**

Perini Corporation was awarded the first iteration of the CONCAP contract, CONCAP I, in 1995 as the managing partner in a joint venture between Perini and J.A.

Jones. The Atlantic Division of the Navy brought Perini in as a managing partner of the joint venture for the multi-year contract providing “rapid response construction services, anywhere in the world, for emergencies related to natural disasters, humanitarian needs, and the peace-keeping efforts of the U.S. Government” (Perini Corporation, p. 1).

The CONCAP I contract’s first test involved cleaning up and rebuilding the Marine Corps Base, Camp Lejeune, after Hurricane Bertha in 1996. The CONCAP I contract was also used for hurricane reconstruction in North Carolina, Virginia, the Caribbean, Florida Keys, and Mississippi (Naval Facilities Engineering Command). OCONUS, CONCAP I was used to design roads in Bosnia, construct a sewage treatment plant in Crete, repair the National Aeronautics and Space Administration’s (NASA) runway in Morocco, and build detention facilities at Guantanamo Bay, Cuba (Naval Facilities Engineering Command, 2009). The contract had a \$200 million ceiling, and 50 TOs were written during its life (NAVFAC, 2007).

In 2000, Perini lost award of the second iteration of the CONCAP contract, CONCAP II, to Kellogg, Brown, and Root Services (KBR). The contract was awarded for one basic plus four option years. Over the life of the contract, there were 52 TOs issued at a cost of \$300 million (Naval Facilities Engineering Command, 2009).

In 2004, KBR was again the successful offeror for the CONCAP III contract. “NAVFAC Atlantic issued the cost-plus-award-fee, ID/IQ contract with a \$500 million not-to-exceed amount over a five-year period to KBR on July 26, 2004” (DoD Inspector General, 2008, p. 5). The five-year period consisted of one basic plus four option years. The CONCAP III contract provided the Navy with a construction capability for emergency response to “natural disasters, military conflict, or humanitarian aid” (Defense Acquisition University, p. 1).

In 2006, the Navy split the CONCAP contract into two separate contracts for construction and support services, namely Global Contingency Construction Contract (GCCC) and Global Contingency Services Contract (GCSC). They allow the Naval Facilities Engineering Command (NAVFAC) to respond to natural disasters and other emergencies around the world. The GCCC contract focuses primarily on construction

and “Dry-In” and “Dry-Out” operations in a contingency environment (DoD Inspector General, 2008). “Dry-In” and “Dry-Out” operations consist of everything from construction and repair of buildings, such as a dome roof (dry-in), to the clean up efforts after a hurricane (dry-out). The GCCC is a multiple-award contract with a \$1 billion ceiling. Three contractors, URS-IAP, LLC (a joint venture between J.V. URS Group and IAP World Services), Fluor Intercontinental, and Atlantic Contingency Constructors (ACC, consisting of JV Shaw E&I, AECOM Government Services, and PAE Government Services) were awarded contracts with one basic year plus four option years on 4 August 2006 (Hemstreet, 2008). The GCCC is a CPAF ID/IQ. “It provides worldwide rapid civilian construction and engineering services response for disaster recovery, military conflict, military operations other than war, humanitarian assistance, or projects with similar characteristics” (Defense Acquisition University, p. 1).

The GCSC is also a CPAF ID/IQ contract. It was awarded to a single contractor, Contingency Response Services (a joint venture between DynCorp International, Parsons Global Services and PWC Logistics), on 30 August 2006. The contract has a ceiling of \$450 million over one basic plus four option years (Hemstreet, 2008). It is used to provide “short term facilities support services with incidental construction in response to natural disasters, humanitarian efforts, contingencies, and non-performance of incumbent contractor” (NAVFAC, 2007, slide 58).

## **2. Operational Use**

Although GCCC and GCSC are used to provide logistical support in contingency environments, these contracts are not intended or equipped to “carry out military defense or offense, [and are] not intended to replace all of the functions and capabilities of the military engineer” (NAVFAC, 2007, slide 60). Hence, neither the scope of the GCCC nor the GCSC matches the breadth of the LOGCAP or the AFCAP. Furthermore, the GCCC and the GCSC are not permitted to operate in openly hostile environments; therefore, they are not currently used in Afghanistan or Iraq.

The NAVFAC created three-part criteria for GCCC use. These criteria consist of: (1) an emergency or contingency situation, or conditions where the mission demands exceed normal acquisition timing parameters and/or where the contingency environment is too austere to rely on local contract support; (2) an element of significant uncertainty as to the scope, or schedule, (i.e., the requirement cannot be well-defined), thus supporting the use of a cost-type contract; and, (3) the work required is predominately construction and construction-related services (Hemstreet, 2008, slide 60). As mentioned, the GCSC was created to supplement the GCCC with support functions necessary during contingency situations. Table 3 provides a list of GCSC capabilities.

GCSC Capabilities	
<ul style="list-style-type: none"> <li>• Air Operations</li> <li>• Port Operations</li> <li>• Range Operations</li> <li>• Operations Support</li> <li>• Facility Support</li> <li>• Health Care Support</li> <li>• Personnel Support</li> <li>• Morale, Welfare &amp; Recreation Support</li> </ul>	<ul style="list-style-type: none"> <li>• Base Support Vehicles &amp; Equipment <ul style="list-style-type: none"> <li>• Housing</li> <li>• Environmental</li> <li>• Public Safety</li> <li>• Ordnance</li> <li>• Galley</li> <li>• Utilities</li> </ul> </li> </ul>

Table 3. GCSC Capabilities (After Hemstreet, 2008, slide 59)

Contract administration for the GCCC and the GCSC can be performed by DCMA; however, it is more likely to be performed by representatives from NAVFAC-Atlantic and NAVFAC-Pacific (i.e., internal Navy contracting assets). The assignment of contract administration responsibilities for individual TOs depends mainly on the location of work. Delegations are passed to the appropriate administration entity at the time of TO award.

#### **D. AIR FORCE CONTRACT AUGMENTATION PROGRAM (AFCAP)**

The U.S. Air Force's Contract Augmentation Program (AFCAP) is a "contingent tool to provide Civil Engineer & Services personnel with a force multiplier by leveraging use of the commercial sector in meeting urgent mission requirements" (AFCESA, p. 1). The program is meant to augment and provide a sustainment substitute for the Air

Force's limited Civil Engineering, Services, and Logistics personnel. The AFCAP III contract is similar in contract and management structure to the LOGCAP contract; however its scope and dollar value are significantly smaller.

## **1. AFCAP: Background and History**

The AFCAP was initiated by the Air Force Civil Engineer Support Agency (AFCESA) located at Tyndall Air Force Base (AFB), Florida in 1996 after witnessing the successes of the Army and Navy's own contingency support programs. The AF recognized that significant personnel reductions left capability gaps in their support functions, mainly civil engineering, services, and logistics. Addressing this gap without carrying additional personnel required the Air Force to contract for contingency design and engineering expertise, capabilities such as dining facility operations, and logistical functions such as War Reserve Materiel (WRM) maintenance.

The first AFCAP contract was awarded in 1997 to Readiness Management Support, LC (RMS) as a joint venture between Johnson Controls and Lockheed Martin. The contract was written for a period of one basic plus four option years. The contract contained both CPAF and FFP line items. The FFP line item was generally used to provide manpower backfills at military bases. The ceiling for the original AFCAP contract was capped at \$452.6 million over the life of the contract (Dowling & Feck, 1999). Both AFCESA and various AF Major Commands (MAJCOMs) use AFCAP support functions. MAJCOMs may request AFCAP support provided they supply the funds and personnel for TO oversight.

The second contract iteration, AFCAP II, was also awarded to RMS as a CPAF and FFP contract in February 2002 with a time period of one basic plus seven option years. TOs for AFCAP II were used to repair, set up, and manage several runways and air traffic control operations in Afghanistan shortly after Operation ENDURING FREEDOM began. In 2003, the AFCAP II contract began providing functions in support of Operation IRAQI FREEDOM. The emphasis in Iraq is on base camp maintenance, WRM management, and providing contractors to augment squadrons of Logistics and Services airmen.



The AFCAP III, the current iteration of the AFCAP contract, was awarded on 8 November 2005 as a multiple-award ID/IQ with a time period of one basic plus nine option years. The six successful contractors are:

- Washington Group International in Denver, CO (contract FA3002-06-D-0001)
- CH2M Hill Global Services in Englewood, CO (contract FA3002-06-D-0002)
- URS/Berger JV in Washington, DC (contract FA3002-06-D-0003)
- Bechtel National in Frederick, MD (contract FA3002-06-D-0004)
- DynCorp International in Fort Worth, TX (contract FA3002-06-D-0005)
- Readiness Management Support in Panama City, FL (contract FA3002-06-D-0006) (Larsen, 2005)

Each contractor competes for new TO awards. The minimum amount to be awarded to each of the contractors is \$15,000. The ceiling for AFCAP III is capped at \$10B for all contractors over the life of all six contracts. To provide the AF with maximum flexibility and maximum cost control, TOs may be written as CPAF, CPFF or FFP. Contract administration and surveillance for the AFCAP III contract is performed by two main entities: Air Force Program Executive Office (PEO) for Combat and Mission Support, (located in Washington, DC) and DCMA.

## **2. Operational Use**

Although the AFCAP is capable of accomplishing bed-down taskings (e.g., food service operations, billeting, constructing perimeter security fences and barriers, etc.), its focus is on sustainment activities. Prime Base Engineer Emergency Force (Prime BEEF) and Rapid Engineer Deployable Heavy Operational Repair Squadron Engineers (RED HORSE) are the main, organic AF civil engineering forces used for accomplishing bed-down taskings. The AFCAP is primarily a relief or augmentation tool for prolonged sustainment activities (Dowling & Feck, 1999, p. 16). Contractors for the AFCAP III contracts are not permitted to be deployed during heavy, combat due to the large amount of risk to unarmed contractor personnel. However, after cessation of heavy combat, the AFCAP III contractors move in to help build and operate new base camps. The AFCAP

maintains only one generic War and Management Plan (WMP) as opposed to the several site-specific plans developed by the LOGCAP. The plan is tested or validated twice per year to ensure the contractors and the deploying forces understand their roles and responsibilities and are familiar with each other's operations.

The contracts are currently used in many areas of Southeast Asia and the Middle East, most extensively in Afghanistan and Iraq. The AFCAP III contracts provide capabilities such as design and engineering, concrete batch plants, power production plants, infrastructure design and construction, tear-down and re-packing services, WRM maintenance and support, and air traffic control. Contractors for the AFCAP III provide deployment relief and longer dwell times (defined as periods between deployments) for frequently deployed AF support personnel. Contractors remain through many cycles of AF deployers and provide much-needed continuity.

In recent years, the Government Accountability Office (GAO), the Congressional Research Service (CRS), and other oversight and accountability agencies have stressed the need for better control over contingency contracting contracts and their associated administration and oversight processes in several reports. The LOGCAP, the GCCC, the GCSC, and the AFCAP are not immune to the criticisms contained in these documents. Perhaps the most recognized recent report is the one entitled "Urgent Reform Required." It is colloquially known as "The Gansler Report" for the head of the commission that wrote the report, Jacques Gansler, and it points out the downfalls of the Army's current contracting processes. It is prudent to note that the Army is not the only service with contracting problems. While the other services were not specifically addressed in the report, they too experience many of the problems highlighted by the report or can preempt problems by learning from the Army's experience.

#### **E. THE GANSLER REPORT ("URGENT REFORM REQUIRED")**

The Congressional Research Service (CRS) report, titled "The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11", states that each logistics program has grown in size, shape, and complexity over the last several years. As the programs have expanded beyond initial capability and cost estimates, the

complexity has increased while the available federal contracting workforce has decreased over the years (Congressional Research Service, 2008, p. 4). The impact of these two conditions, growth in size and complexity, has created a situation where fewer federal contracting officials can effectively manage these large-scale contracts. The fast operations tempo of the contemporary contingency environment affects the workforce's ability to meet all the needs of the supported unit and make sound contracting decisions. This situation leads to compromising thoroughness and sound business judgment for speed. When a contracting officer loses the ability and time to make sound business decisions, the repercussions show themselves in poor stewardship of U.S. taxpayer resources, inattention to the public interest, loss of public trust, loss of integrity for the contracting officer, lack of accountability, and latent defects with regard to the contract itself (i.e., several major changes or modifications to the contract because it was poorly written from the start).

Dr. Jacques Gansler, former Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)), reviewed the Army's acquisition system and its role in large-scale expeditionary operations. Gansler's commission traced audits and investigations involving the actions of both contractors and Government contracting personnel. The commission used those investigations to identify and highlight major issues associated with contemporary contingency contracting.

The Gansler Report identified four critical areas for the Army to focus on for future success in contingency environments: (1) increased stature, quantity and career development for contracting personnel—both military and civilian, particularly for expeditionary operations; (2) restructure of the organization and responsibility to facilitate contracting and contract management; (3) training and tools for overall contracting activities in expeditionary operations; and (4) obtaining legislative, regulatory, and policy assistance to enable contracting effectiveness—important in expeditionary operations (Army.Mil/News Release, 2007). The Gansler report identified areas that the Army needs to improve in order to be better prepared for future contingency operations. It is the intent of this study to utilize the areas identified in the report to explore improvement opportunities.

Improvement opportunities inherently require change. Change can come in many forms, such as policy changes, change in processes or practices, changes in behaviors, and changes in organizational culture. If a JCAP is implemented, there will be several changes in policies and procedures that will influence and guide changes in organizational behaviors and culture. The next section addresses organizational structures and change so that the reader is aware of the impediments that may block the transition from individual CAPs to a JCAP.

## **F. ORGANIZATIONAL STRUCTURE AND CHANGE**

Throughout the 1990s, organizational change has been the focus of many studies ranging from the Sashkin and Burke (1987) to Pasmore and Fagans (1992) studies. Research themes found in these studies addressed content issues, contextual issues, process issues, and nature of criterion variables commonly assessed as outcomes. This literature review highlights the significant findings per research focus. (Armenakis & Bedeian, 1999, pp. 293–294)

Research focused on content identified two dynamics inherent to organizational change: transformational and transactional. Transformational factors deal with areas that require new behaviors as a consequence of external and internal environmental pressures while transactional factors deal with psychological and organizational variables that predict and control motivational and performance within a controlled climate.

Contextual research highlights several facets of organizational change pertinent to this study. First, environmental change does not necessarily increase the “probability of strategic re-orientation.” Second, older organizations have the tendency to resist change more than younger organizations. Third, the size of an organization does not directly relate to the responsiveness to change within the organization. Fourth, organizations have the tendency to revert to changes previously implemented or experienced. Finally, organizational strategy changes do not directly contribute to the failure of an organization. “A change effort is likely to fail if an organization adopts a strategic orientation that does not match the requirements of its external environment.”

Process research studies recommend phases for “change” agents to implement to ensure successful organization change and demonstrates how organizational members react to change within an organization as the change unfolds. Several premises came out of the studies: (1) creating readiness for change minimizes resistance; and (2) converting constituencies affected by change into “agents of change.” Ultimately, the process “used to plan and enact an organizational change is as important as the state of existing content and contextual factors” (Armenakis & Bedeian, 1999, pp. 296–303).

In terms of outcomes variables, various studies determined that outcomes were more often described in terms of success/failure criteria, such as profitability or market share. Further, organizational members are more likely to resist change if they believe that they stand to lose something of value, such as their job or duty position, etc. As a result, individuals may have the tendency to protect one’s self-interests without regard for the overall “health” of the organization.

When developing a culture or considering a culture change, a company generally selects an organizational structure that will suit its desired culture. Federal Express has a more centralized structure than some companies because of its focused mission to provide totally reliable, competitively superior global air-ground transportation of high priority goods and documents that require rapid, time-certain delivery. (United States General Accounting Office, 1992, p. 11)

The GAO report (1992) and Denison (1997) suggest that four major cultural aspects apply to the problem at hand. The areas explored by Denison (United States General Accounting Office, 1992) are: (1) the values and beliefs held by an organization’s members; (2) policies and practices used by an organization; (3) the translation of core values and beliefs into policies and practices in a consistent manner; and (4) the interrelationship of core values and beliefs, policies and practices, and the business environment of the organization.

Many public organizations, to include the DoD, are structured as centralized organizations. Centralized organizations have a high degree of hierarchical authority and participation in the decision-making process is limited to the highest ranking players. Centralized organizations benefit from high levels of command and control and

standardization; however they are inhibited by their inflexibility and lack of alternate viewpoints (Andrews, Boyne, Law, & Walker, 2007). To effectively implement a JCAP, centralization of PEOs, practices, and policies is essential; however organizational leaders must ensure that centralization does not prohibit effective and rational decision-making nor program flexibility.

Policies and procedures changes are routine occurrences in DoD. While not necessarily easy to implement, most servicemembers and public servants are used to periodically changing their practices to adhere to new guidance. Organizational culture, like organizational policies and procedures, is hard to change. The values and beliefs common among individuals in the same organization are deeply-rooted and cannot be changed overnight. JCAP implementation would require each service to change a bit of their culture to meet the new, joint culture. Organizational culture is highlighted to emphasize to the reader the importance of acknowledging that this change will be time-consuming, and the importance of securing leadership commitment to the change so that it is not defeated by slow progress.

## **G. ORGANIZATIONAL CULTURE**

The concept of organizational culture has received considerable attention within organizational theory in the last decade (Eisenberg & Riley, 2001). Researchers of organizational culture have explored the role of commitment to organizations, mutual beliefs and a sense of community in workers' everyday interactive lives (Gudykunst et al., 1985). Organizational culture is a pattern of basic assumptions invented, discovered, or developed by a given group as the group learns to cope with its problems of survival in an external environment and its problems of internal integration (Schein, 1990) (Driskill & Brenton, 2005, p. 17).

For the purposes of this study, culture will be defined using the root metaphor approach. The root metaphor approach presents three premises: culture as a shared cognition; culture as systems of shared symbols; and culture as the expression of unconscious processes. Each premise addresses specific details; however, this study only addresses the broader concepts such as patterns of logic shared among an organization,

organizational symbols, and how organizational symbols display underlying beliefs and assumptions (Driskill & Brenton, 2005, p. 30). Organizational culture exists to support an organization's strategy, to prescribe acceptable ways to interact, and to set performance criteria (Gordon, 1999).

Gagliardi (1986) identifies two types of cultural change: cultural incrementalism and cultural revolution. Cultural incrementalism incorporates new values and assumptions that do not challenge or debunk the existing cultural elements. Cultural revolution, on the other hand, causes some of the existing cultural elements to be abandoned as new ones replace them (Golembiewski, 1993). How easy or difficult it is to change an organization's culture is directly related to whether the culture is weakly or strongly embedded. Enacting change (whether incremental or revolutionary) requires transformational leadership. The transformational leader must hold the respect of his/her subordinates and include them in the decision to change and in the actual change process itself. Cultural change is not easy, but it is possible to change an organization's culture in a way that does not alienate the members of the organization. Gordon (1999) notes that top management should provide the vision and support for the change, while mid-level and lower-level managers should devise the policies and practices to enact the change.

The Joint Strike Fighter is a case where the services and allied partners were able to overcome organizational change and cultural barriers to successfully field and deliver an aircraft that meets the individual needs of each participant. They did so while spending less time and money than would be spent on 13 (three U.S. military services plus 10 allied partners) individual programs. It is this concept of working jointly to eliminate redundant programs that first sparked the researchers' interest in the feasibility of a JCAP.

## **H. F-35 JOINT STRIKE FIGHTER (JSF)**

This program is relevant to our study because it demonstrates a successful process for conducting a joint program. Although multiple services (to include allied partner services) are interested in individual outcome of the Joint Strike Fighter (JSF) program, the U.S. Military has a structure in place that addresses individual service interests while

maintaining progress within the program itself. Joint development is “responsive, efficient, and in the best interests of the success of the JSF program” (Congressional Research Service, 2009, p. 5). In order to gain understanding into how a joint program works, the researchers reviewed the processes and structure of a large-scale joint program, the JSF. This program provides insight into how participating nations and services work together to develop the requirement and production of a fighter aircraft.

The JSF Program, formerly known as the Joint Advanced Strike Technology (JAST) Program, is the Department of Defense’s focal point for defining affordable next generation strike aircraft weapon systems for the Navy, Air Force, Marines and U.S. Allies. “The program’s rationale and primary emphasis is joint-service development of a next-generation multi-role strike aircraft that can be produced in affordable variants to meet different operational requirements” (Congressional Research Service, 2009). The program was structured...to be a model of acquisition reform, with an emphasis on jointness, technology maturation, concept demonstrations, and early cost-performance trades integral to the weapon system requirements definition process (Congressional Research Service, 2009, pp. 2–3).

Much like the JSF program, we intend to demonstrate the applicability of a joint partnership in contingency logistics support programs. The JSF program is jointly staffed and managed by the Department of the Air Force and the Department of the Navy (comprised of the Navy and Marine Corps) with coordination among the services reinforced by alternating Air Force and Navy Department officials in key management positions (Congressional Research Service, 2009).

A key benefit of this program is the maximum commonality in the airframe, engine, and avionics components to reduce development, production, operation and support costs (Congressional Research Service, 2009, p. 3). Former Secretary of Defense William Cohen stated, “that the JSF’s joint approach ‘avoids the three parallel development programs for service-unique aircraft that would have otherwise been necessary, saving at least \$15 billion’” (Congressional Research Service, 2009, p. 3). The JSF program resembles the notion of a JCAP in that both attempt to gain efficiencies



by capitalizing on and leveraging similar needs and by eliminating expensive redundancies through the use of one joint program.

## **I. SUMMARY**

This literature review presents studies and theories useful in determining the feasibility of a JCAP. The Gansler Report lays the foundation for change within the acquisition community in contingency situations. Although the report focuses primarily on LOGCAP, the crux supports the need for a joint program in terms of program responsiveness, effectiveness, training, and the limited number of available workers in the field of contracting. Organizational analytic tools that highlight the importance of recognizing organizational structure, change processes, and culture provide a framework to manage change in the most effective manner, should a joint program be implemented. Finally, the use of the JSF program as a model demonstrates the reality of multiple nations and services working hand-in-hand to create, maintain, and execute a large-scale program that satisfies the various needs of each of the individual services involved in the acquisition. This program is an example of how limited funding and a willingness to work jointly can be successful despite organizational or cultural differences.

The following chapter introduces Cost-Effectiveness Analysis (CEA) and how it will be used in the course of this study. It also details how the researchers performed and collected data from semi-structured interviews. Finally, it discusses the type of questions asked and information sought for each of the five potential effectiveness and efficiency areas.

### **III. METHODOLOGY**

#### **A. INTRODUCTION**

This study examines the advantages and disadvantages of a consolidated JCAP by performing a qualitative Cost-Effectiveness Analysis (CEA) of five program areas: (1) Planning, (2) Capabilities Provided, (3) Financial Processes, (4) Command and Control, and (5) Ease of Use for both managers/administrators and users/customers. Again, the purpose of the study is to measure both CAP effectiveness (i.e., bridging or satisfying capability gaps that exist within each services' current CAP) and efficiencies (i.e., streamlining and standardization of process to facilitate ease of program use) to be gained by establishing a JCAP. The CEA methodology allows the researchers to simultaneously consider both costs and effectiveness in a qualitative manner. To garner information for analysis, key program participants such as Program Managers (PMs), Procuring Contracting Officers (PCOs), Contract Administration Office (CAO) Commanders, Administrative Contracting Officers (ACOs), Quality Assurance Representatives (QARs), and Users/Customers were interviewed.

#### **B. COST-EFFECTIVENESS ANALYSIS (CEA)**

Cost-Effectiveness Analyses (CEA) is popular in Government (public) decision-making (Thompson, 1980; Quade, 1965). This method helps decision-makers make informed choices on matters that lack quantifiable information. The ensuing discussion introduces CEA and details how it will be used in the study.

##### **1. Introduction to Cost-Effectiveness Analysis (CEA)**

CEA “can be used to determine whether any objective is worth achieving, which among alternative objectives should be achieved, and the way to achieve any set objective” (Thompson, 1980, p. 221). It has been defined as “benefit-cost analysis without monetary valuations of program outputs” (Thompson, 1980, p. 225) and “any analytic study designed to assist a decisionmaker [to] identify a preferred choice from among possible alternatives” (Quade, 1965, p. 1). CEA is used when program effects

are difficult to value, including those that take into effect the cost or quality of human life or process efficiencies. CEA is popularly used by hospitals for making health care decisions and by the military for making weapons systems capability assessments. “With program effects [that are] difficult to value, an appealing analytic approach is *not* to value them: to work through all other parts of the program valuation; to organize and present information that will aid valuation of these effects; but to leave the actual value judgments on them to the decision-makers (and not to the analysts)” (Thompson, 1980, p. 222).

Thompson (1980) goes further to address four difficulties associated with placing or determining program value. The first difficulty is the global nature of the value. CAP support in contingency situations may not provide any benefit at all to many of the taxpayers whose dollars support the program. How do you account for the value (or lack thereof) placed on CAPs from the taxpayer’s perspective? The second difficulty is the inability to compensate losses. What is the true cost of *not* having a JCAP in place? What do the warfighter and taxpayer lose by choosing to provide contingency logistical support functions in a different manner? The third difficulty takes into account goals as constraints. In other words, how does the logistical support provided by individual CAPs compare to the support theorized by a JCAP? Is there an improvement in quality, cost, and/or customer satisfaction? What value do you place on improvements? Likewise, what is the value given up by failing to make improvements? The fourth difficulty accounts for an excess of imponderables. Uncertainty of events (as occur in war or other contingency situations) produce unanswerable questions for decision makers. How long will this contingency last? What types of support will be required? How much of that support will a JCAP provide? It is very difficult to place certain values on uncertain elements.

Due to the confounds associated with the study of complex problems for which value uncertainties are prevalent, the researchers have turned to CEA for valid analysis. CEA has been used in professions where outcomes are difficult to measure. For instance, in health care, CEA is used to weigh healthcare benefits against potential costs of foregoing those benefits. While the cost of providing additional physicians or testing

may be well documented, the cost of *not* providing the benefits and the potential risks to human life are difficult to measure. The same is true of some military weapon platform decisions. Effectiveness in the military weapon platform context is often measured in lives saved. The benefit or value of the number of lives saved is also difficult to quantify. While it is possible to quantitatively analyze how much a new bomber airplane costs, it is much more difficult to measure the benefits, or effects, achieved by the new aircraft (how effective the payload is against curbing the actions of enemy combatants, how striking a target helps meet the overall war strategy, and how many potential lives can be saved).

CEA attempts to make the effects of a particular decision easier to decipher and compare by valuing them with common, equivalent criteria. The common value may be expressed in terms of cost, time, functionality, or a host of other criteria. The CEA data for this study were garnered via qualitative interviews with experienced informants in order to “capture data on the perceptions of local actors ‘from the inside’, through a process of deep attentiveness, of empathic understanding, and of suspending or ‘bracketing’ preconceptions about the topics under discussion” (Shaw, 1999, p. 13). The intent is to interpret the actions of the main players in a process that has limited resources to understand why certain actions are taken and to identify potential courses of action (and the cost-effectiveness and efficiency of each course of action) for policy maker decision-making purposes. CEA relies on subjective judgment used in a systematic manner. In other words, information provided by expert informants is used to assess and interpolate value for a particular set of criteria in order to make the best, most effective decision possible.

Quade (1965) prescribes one method for implementing a CEA. He presents five steps to walk a user through the process:

1. The Objective—to help choose a policy or course of action. What is the decision to be made?
2. The Alternatives—substitutes or another way to perform the same function. What are the means by which we can obtain the objective?
3. The Costs—determining what we are forgoing by choosing one alternative. What are the opportunity costs?

4. A Model—visually representing the objectives, alternatives and costs. Used as a means to predict the cost that each alternative would incur and how effective that alternative would be in obtaining the objective
5. A Criterion—rule or standard to rank the alternatives or weigh the costs against the alternatives. Which alternatives are most desirable?

Using those five steps, Quade (1965) suggests the following approach:

The consequence of choosing an alternative (which may have to be discovered or invented as part of the analysis) are obtained by means of the model or a series of models. These consequences tell us how effective each particular alternative is in the attainment of the objectives (which requires that we have a measure of effectiveness for each objective) and what the costs are. A criterion can then be used to arrange the alternatives in order of preference. (emphasis in original, Quade, 1965, p. 63)

He also points out some “defects” in this type of analysis: short-sightedness or attention bias that fails to involve all inherent matters into the analysis; analysis that is “necessarily incomplete” (i.e., the analyzer uses non-quantifiable factors such as expertise and judgment where specific monetary or time values cannot be obtained); effectiveness measures that are inevitably incomplete (i.e., using best judgments and approximations in lieu of hard, measureable data); ways to predict the future that are lacking; and all analysis of choice falls short of scientific research (i.e., providing recommendations based on understanding and predictions vice factual/testable figures) (Quade, 1965, pp. 10–14). Where possible, actual monetary costs will be used in the CEA for this study.

## **2. CEA Application to JCAP Study**

CEA is the most appropriate analysis tool for a JCAP case study because it associates the *processes* and *how* the programs operate with the potential cost savings of a JCAP. Costs associated with the CAPs are important, of course; however proper analysis should also include program effectiveness since they (the programs) are used in contingency situations where meeting the needs of the services (i.e., the quality and timeliness, or schedule, of support) are at least equal, if not more important, than cost.

The CEA methodology permits the simultaneous consideration of both costs and effectiveness (measured in quality and timeliness of support capabilities) in a qualitative manner.

This study will employ CEA to evaluate the five analysis areas in order to provide senior leaders with useful information for deciding whether to keep the CAPs separate or to combine them into a single JCAP. For instance, for the first potential efficiency area, Planning, we intend to perform a CEA to determine if maintaining separate, service-specific plans for using programs in contingency situations is more effective or less effective than having one, combined plan under JCAP. As another example, for the fourth potential efficiency area, Command and Control, we intend to perform a CEA to determine if maintaining separate CAPs is easier or more difficult to administer and provide oversight for (by both the PEO and CAO) than it would be for one JCAP (while at the same time maintaining the current level of program effectiveness). The qualitative analyses in each of the five areas will provide a framework for valuation and decision-making by senior leaders.

## **C. DATA COLLECTION**

Data for this qualitative study was collected mainly from semi-structured interviews and follow-up questions with key informants. This section details how the semi-structured interviews were conducted and how the sample of participants, or informants, was chosen. It also provides insight into how the researchers developed questions for each of the five analysis areas.

### **1. Structured Interviews**

The interview process began with the development of seven different interview protocols that correspond with each of the six groups of informants (PMs, PCOs, CAO Commanders, ACOs, QARs, and Users/Customers) plus one protocol that encompasses questions for all groups. These informant positions were selected because they are key to the success of the programs, and the people who hold them are often quite familiar with the inner workings of the entire program, not just their specialty area. Here, open-ended questions were developed (see Appendix) to collect the requisite data from key

informants. The goal was to develop questions that provided insight into the informants' experiences and garnered their thoughts on the cost effectiveness or ineffectiveness and efficiencies or inefficiencies associated with the current CAPs and a potential JCAP.

Since our analysis is largely qualitative, the questions are process-related and fairly open-ended, allowing the informant to provide his or her personal insights and experiences. Efforts were made to avoid biases by ensuring the questions were not leading the informant in any particular direction, but rather probing for his or her personal experiences and thoughts. To bolster face validity, the interview protocols were reviewed and edited by subject matter experts, to include one of the advisors on this project.

Throughout the interview process, trends emerged among the responses that signaled "converg[ence] on the same set of facts or findings" (Yin, 1994, p. 78). This allowed main ideas to be triangulated from multiple sources (e.g., interviews, GAO reports, etc.) and interpreted by the researchers. Often during the interviews, other possible informants were suggested as a way of corroborating and evidencing the informant's experiences. These additional sources allowed findings to be substantiated and provided a greater pool of informants and data. After the initial semi-structured interviews, additional questions arose and were posed to all of the informants. Again, trends were pulled from the responses to these additional questions and used by the researchers during analysis.

## **2. Sample**

Once the questions were developed, the process of selecting informants began. A convenience sample, rather than a random sample, was taken because identification of and access to the entire population of CAP administrators and users was not possible. The intent was to maximize the number of participants who had experience with *more than one* services' CAP in order to identify valid areas of overlap and process efficiencies and to reduce the number of interviews required. In other words, the focus was to determine whether there was excessive duplication in the use of multiple CAPs that could be eliminated with a JCAP.

Another focus was to determine “best practices” or areas of efficiency in the individual programs. If these efficiencies do exist, are they able to be transferred to a JCAP, or do they lose their effectiveness when combined into a single, joint program? Another goal was to interview a sufficient number of informants so perspectives from each program and functional role are captured and considered. A limitation experienced during the study was the ability to find, contact and coordinate an interview with several informants in a timely manner. Because military members often relocate, separate, or retire from service, the pool of candidates was difficult to access. Furthermore, contractor employees with actual field experience were unable to provide information. Instead, they referred us to their public affairs offices. Unfortunately, public affairs representatives could not provide detailed answers because of their lack of field experience. Nonetheless, 16 government participants were found and all provided useful, relevant information to the study.

The LOGCAP and the AFCAP have been used extensively in Operations ENDURING FREEDOM and IRAQI FREEDOM; therefore, it was fairly easy to find informants who had participated in both the LOGCAP and the AFCAP. It was more difficult to find participants who had dual experience with the LOGCAP or the AFCAP *and* the CONCAP, GCCC, or GCSC because these programs do not operate in openly hostile areas and, therefore, have not been used in the same ENDURING FREEDOM and IRAQI FREEDOM geographical areas as the LOGCAP and the AFCAP.

Participants were selected from a large number of CAP duties: Program Managers (PMs), Procuring Contracting Officers (PCOs), Contract Administration Office (CAO) Commanders, Administrative Contracting Officers (ACOs), Quality Assurance Representatives (QARs), and Users/Customers. Each duty provides a different perspective of the program. The mix of short-term (generally military members) and long-term (generally civilians) experience provided an over-arching, all-encompassing look at the state of the current CAPs and the potential cost-effectiveness and efficiency of a JCAP. The majority of participants had recently (i.e., within the last two years) dealt with the programs, so the information received is deemed current and relevant. Tables 4–6 identify the informants’ backgrounds and associations with the programs.



Informant Background and Program Association—LOGCAP				
Program Role	Rank (If applicable)	CAP Experience (Years)	Career Field	Owning Organization
PM	GS Employee	5	Program Management	ASC
PCO	GS Employee	7	Contracting	ASC
CAO Commander	O-6	2.5	Logistics	DCMA
ACO	O-5	1	Contracting	DCMA
ACO	O-5	2	Contracting	DCMA
QAR	GS Employee	1	Quality Assurance	DCMA
User/Customer	O-6	13	Multi-Functional Logistics	82d Airborne Division
User/Customer	O-5	1	Field Artillery	4 <sup>th</sup> Infantry Division

Table 4. Informant Background and Program Association—LOGCAP

Informant Background and Program Association—GCCC & GCSC				
Program Role	Rank (If applicable)	CAP Experience (Years)	Career Field	Owning Organization
PM	GS Employee	4	Contracting	NAVFAC Pacific
PCO	GS Employee	3.5	Contracting	NAVFAC Atlantic

Table 5. Informant Background and Program Association—GCCC & GCSC

Informant Background and Program Association—AFCAP				
Program Role	Rank (If applicable)	CAP Experience (Years)	Career Field	Owning Organization
PM	GS Employee	8	Program Management	AFCEA
PCO	GS Employee	9	Contracting	AFCEA
CAO Commander	O-6	2.5	Logistics	DCMA
ACO	O-5	1.5	Contracting	DCMA
ACO	O-4	1	Contracting	DCMA
User/Customer	O-5	1	Field Artillery	4 <sup>th</sup> Infantry Division

Table 6. Informant Background and Program Association—AFCAP

### 3. Question Development

The questions posed in this study mirror the five potential efficiency areas as closely as possible in order to make analysis easier to follow. Although there were five major analysis areas, we constructed six question areas: (1) planning questions, (2)

questions regarding the breadth of capabilities provided, (3) financial processes questions, (4) command and control questions, (5) ease of use questions, and (6) general and program process questions. The interview protocol is found in the Appendix.

***a. Planning***

The first of the five main areas, Planning, examines initial ID/IQ contract award, how new TOs are negotiated, and how new requirements are added to the contract. The advantages and disadvantages of each method are extracted and explained by the cultural differences in the way each service conducts contingency operations. It is generally accepted that planning with the contractor is critical to mission success; therefore, the goal of the planning questions is to determine the costs-effectiveness and efficiency associated with planning using separate CAPs versus a single JCAP.

***b. Capabilities Provided***

The second area, Capabilities Provided, examines whether the current CAPs are able to meet the needs and requirements of the services they are supporting, if there are any gaps in capabilities (requirements that cannot be fulfilled due to the program's structure or limitations), and the amount of overlap or duplication of capabilities that exists among the programs. The goal of the capabilities questions is to determine the cost-effectiveness and efficiency with which the breadths of capabilities are provided by the current CAPs. How much duplication exists and what are the costs associated with duplication? Does having duplicated areas increase the effectiveness of the programs? Are there gaps in one program that might be fulfilled by a different CAP or be better served by one all-encompassing JCAP? Could overlaps be more efficiently provided by one JCAP?

***c. Financial Processes***

The third area, Financial Processes, examines the ease or difficulty of funding the programs. It takes into consideration multiple service and coalition partner use. The goal of the financial questions is not necessarily to look at the hard figures and determine acceptability; rather, it is to look at the financial transfer costs (i.e., how often

money is transferred from one service to another to use CAP functions), of sharing the CAPs with sister services and coalition partners, and how efficiently the transfers of funds are accomplished. Are the transfers easy or difficult to enact? Is the transfer process time consuming or not? Would it be easier to fund one JCAP for all services to use? It is a process-based approach vice a numerical-based approach. In other words, it is an examination of how financial matters are handled in each program vice the amount of money associated with the programs.

*d. Command and Control*

The fourth area, Command and Control, examines how effectively and efficiently the program is managed from the viewpoint of both the contract administration entities (i.e., the PEO and the CAO) and the area of operations commanders. There are many organizations involved with the CAPs. The Program Executive Offices (PEOs) are the owners of the programs. The main PEO players are the Program Manager (PM) and the Procuring Contracting Officer (PCO). The PEO is responsible for the overall program; they are essentially the “home base” of the CAP. The PEO creates and issues the ID/IQ contract and all subsequent TOs.

The CAP’s administrative body is the Contract Administration Office (CAO). The CAO players include the CAO Commander, the Administrative Contracting Officer (ACO) and the Quality Assurance Representative (QAR, sometimes referred to as the Quality Assurance Evaluator, or QAE). The CAO is responsible for the day-to-day oversight of the individual TOs and the related contractors in their area of operations, and they receive their delegation of responsibilities from the PCO. The PEO and CAO interact and communicate continuously to ensure proper program use.

The user or customer is the commander and staff of the supported unit. The customers generate requirements that are captured and fulfilled by the CAO in collaboration with the PEO. There are also “outside” relationships that affect the CAPs. For instance, in some situations, CAP contractors must interact with non-CAP contractors (such as local firms contracted from local contracting activities and coalition-country firms contracted from both local contracting activities and U.S.-based contracting

activities) when their tasks overlap or connect. Another “outside” relationship is that of the contractor with the host nation. Many CAPs require the contractor to use host country nationals (HCNs) in the fulfillment of contract requirements to the maximum extent possible (e.g., as food service personnel, as cleaning crews, as skilled craftsmen, etc.). Therefore, the contractor must maintain favorable relationships with local populations. As is evident, the command and control of a CAP is highly complex.

This area explores the ability of the PEO and CAO to effectively manage the program with current resources and whether duplication of personnel exists among the CAPs. The goal of the command and control questions is to ascertain the costs of managing separate CAPs (including both CONUS and OCONUS administration) and the effectiveness of the management process. Would management be streamlined (by reducing duplication) and oversight be strengthened by using a single JCAP?

*e. Ease of Use*

The fifth area, Ease of Use, examines how easy or difficult it is for the customer to understand the program and its various uses, and how easy or difficult cross-service CAP utilization is (i.e., how easy or difficult it is for the Army to request and receive the AFCAP functions). Questions in this area pertain to standardization of processes, and the ease or difficulty of turning on or adding requirements to the contract. The goal of the ease of use questions is to determine the learning curve costs associated with CAPs and how effectively the programs adjust and adapt to meet the needs of the commanders. Could implementing a JCAP flatten the learning curve? Would a JCAP be flexible enough to accommodate the needs and requirements of all supported services?

*f. General and Program Process*

The general and program process questions are additions to the five main areas. The general questions encompass demographic-type inquiries (e.g., which programs the informant has been associated with, in what capacity they served the program, etc.), and questions pertaining to the overall goal of our study (e.g., what the informant believes to be the overall costs and benefits associated with combining the CAPs). The goal is to gain insight into the informants’ experiences with both their job

duties and with the programs. The program process questions take a closer look at the specific processes each informant performs in his or her job (e.g., does the informant believe the programs' processes are standardized in a way that helps him or her to perform their duty?). The goal with these questions is to identify differences in the basic processes of each CAP in order to capture any "best practices" that exist and to capture differences in processes that cause higher costs or less effectiveness/efficiency, or both. Best practices might become useful for any ensuing acquisition strategy, be it centralized or decentralized.

#### **D. SUMMARY**

This report uses CEA to analyze the five potential efficiency areas of a JCAP. The goal is to glean expert opinions and insights from informants during semi-structured interviews and use patterns of opinions and insights to assess the effectiveness and efficiency of the individual CAPs and the effectiveness and efficiency of a single JCAP. Key program participants will provide the data necessary to draw conclusions and make recommendations for senior-level decision-makers. The next chapter, Cost Effectiveness Analysis, displays the results of the data gathering and the researchers' assessments.

## IV. COST-EFFECTIVENESS ANALYSIS

### A. INTRODUCTION

In order to better understand the effectiveness of each program, and whether there are efficiencies to be gained by implementing a JCAP, a cost-effectiveness analysis (CEA) was performed on each of the five study areas. As a reminder, the five study areas are displayed in Table 7.

Potential JCAP Efficiencies	
<u>Efficiency Area</u>	<u>Operation/Process/Criteria</u>
Planning	<ul style="list-style-type: none"><li>• Acquisition Planning and Source Selection</li><li>• Planning for New Requirements</li></ul>
Capabilities Provided	<ul style="list-style-type: none"><li>• Gaps in Capabilities Available</li><li>• Overlaps in Capabilities Available</li></ul>
Financial Processes	<ul style="list-style-type: none"><li>• Funding from Sister Services</li><li>• Funding from Coalition Partners</li></ul>
Command & Control	<ul style="list-style-type: none"><li>• CONUS Program Administration and Oversight</li><li>• OCONUS Program Administration and Oversight</li></ul>
Ease of Use	<ul style="list-style-type: none"><li>• Ability to Understand the Program and its Uses</li><li>• Cross-Service Utilization of CAPs</li></ul>

Table 7. Potential JCAP Efficiencies

The analyses seek to answer the overall research question, “Is it more cost-effective and efficient for the Army, Navy and Air Force to combine their individual CAPs into one JCAP?” This question is addressed by answering the six secondary research questions:

- How is planning affected by a JCAP?
- What efficiencies are gained by combining the support requirements of the individual services into one JCAP? Which areas of duplication can a JCAP eliminate?
- How are financial processes affected by a JCAP?

- How are CONUS program administration and OCONUS program administration and oversight affected by a JCAP?
- How is ease of use affected by using a JCAP vice individual programs? Will one program serve the needs of the combatant commanders better or worse than individual service-specific programs?
- How will different service cultures affect the implementation, utilization, effectiveness and efficiency of a JCAP?

## **B. CEA: PLANNING**

Planning is a process that occurs continuously throughout the life of a CAP, from building the overarching acquisition plan to adding new requirements to the contract. As noted in Joint Publication 4-0,

Planning for the use of contracted capabilities is a complex undertaking. It must address both contracting capability and the management of contractor personnel. Planning for contract support is complicated by the fact that support flows from inside and outside the theater. Detailed planning should be done for both contracting support (contracting support plan) and contractor (personnel) integration (either integrated into appropriate functional areas of the plan or in a separate contractor integration plan annex). (Department of Defense, 2008)

This section analyzes two of the main areas of CAP planning: (1) acquisition planning and source selection, and (2) planning for new requirements. It defines the research question and details how the CEA will be performed.

### **1. Research Question**

The research question, “How is planning affected by a JCAP?” aims to determine what planning differences, if any, exist between the individual CAPs and how using a JCAP might shape or change the planning process. Analysis of the acquisition planning and source selection processes examines the number of manhours it takes to formally select program contractor(s) for each of the individual CAPs and projects the number of manhours required for a single JCAP. Planning for new requirements (i.e., requirements fulfilled by the use of TOs) will use the same man-hour analysis; however, it will compare new requirements sourced under each CAP to the time consumed using one JCAP. Manhours in both areas of analysis is defined as the number of employees the

process took multiplied by the number of hours each person worked each day multiplied by the number of days each process spanned. Naturally, not every person worked solely on the requirement every day; thus, allocated time must be considered. Allocated time will be approximated based on information provided by informants. Each informant was asked questions pertaining to how many people were involved in each planning process and the number of hours each person committed to CAP planning tasks to ensure the accuracy of the figures.

## **2. Acquisition Planning and Source Selection**

Planning for the individual CAPs and for a single JCAP starts at the development of the program's acquisition plan. The program office works in conjunction with the users, or customers, to develop a broad Statement of Work (SOW) whose scope encompasses all requirements that might be necessary for the contractor to perform over the life of the contract. Interested offerors attend "industry days" or other forums held by the program office to pose questions and inquire about the requirement. The program office uses the contractor's questions to further define the requirement for potential offerors. No requirement is ever perfectly composed when it is announced; however, the program office and acquisition planners do their best to capture and define as much of the requirement as possible before they issue the Request for Proposals (RFP). Once issued, offerors have a specific amount of time (generally three to four months for a requirement the size of a CAP) to prepare their proposals.

Once the proposals are submitted, source selection begins. The program office typically receives eight to twelve offers from well-known companies in the industry (e.g., KBR, IAP, DynCorp, Bechtel, etc.), subsidiaries, or joint ventures. The proposals and their attachments can be hundreds of pages in length, and each requires thorough review. Therefore, in order to evaluate the highest rated offers and make award(s) in a timely, efficient manner, the program office down-selects the proposals to a manageable competitive range. This action is permitted per FAR 15.3(c), which states,

Based on the ratings of each proposal against all evaluation criteria, the contracting officer shall establish a competitive range comprised of all of the most highly rated proposals. Provided the solicitation notifies offerors



that the competitive range can be limited for purposes of efficiency, the contracting officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

Once the competitive range is established, the program office holds discussions to better understand the offerors' proposals. Proposal review, competitive range selection and discussions can take up to five months to complete, given the large amount of information to review and evaluate. Finally, after the source selection is complete, contractor(s) are chosen and award(s) is (are) made.

CAPs are unique in many ways. The sheer magnitude of dollars associated with the programs draws the attention of the few companies who specialize in contingency life support capabilities. In general, the same contractors (or their subsidiaries) are involved, or have been involved, in one or more of the CAPs. CAP contracts are generally awarded for one basic plus several (i.e., between five and nine) option years, which means the chance to win a contract only occurs approximately once or twice per decade. Furthermore, once a company wins a CAP contract, it is guaranteed work on that ID/IQ contract, barring any major errors or problems with performance. FAR 16.504(a) 1 states,

The contract must require the Government to order, and the contractor to furnish, at least a stated minimum quantity of supplies or services.

For LOGCAP, the minimum order for the Serco support contract is \$613,677.60 and for each of the execution contracts, the minimum is for each company to establish a core program office (HQ Army Sustainment Command, 2008). GCCC has a minimum award amount of \$100K for each of its contractors (Anderson, 2006). AFCAP III has a minimum award amount of \$15K for each of its contractors (Larsen, 2005). For multiple-award programs, TO awards are competed on a "fair opportunity" basis between the incumbent contractors. The contractors are incentivized to perform well on each TO award they receive, as past performance serves as a factor for future TO awards. In some situations, the fair opportunity process can be excused. Per FAR 16.505(b) 2, exceptions include:

(i) The agency need for the supplies or services is so urgent that providing a fair opportunity would result in unacceptable delays.

(ii) Only one awardee is capable of providing the supplies or services required at the level of quality required because the supplies or services ordered are unique or highly specialized.

(iii) The order must be issued on a sole-source basis in the interest of economy and efficiency because it is a logical follow-on to an order already issued under the contract, provided that all awardees were given a fair opportunity to be considered for the original order.

(iv) It is necessary to place an order to satisfy a minimum guarantee.

Because the CAP contracts have the potential to be worth hundreds of millions, or even billions of dollars, and because the industrial base of companies capable of providing CAP capabilities is small, competition is often fierce. A mistake in the acquisition process can cause an unsuccessful offeror (or a group of unsuccessful offerors) to file a protest claiming an impropriety. The Government is obligated to investigate all protests and make a determination regarding its merit. This process can take several months, as witnessed in the LOGCAP IV protest that took nearly four months to investigate and another six months to correct the deficiencies identified. After ten months of analyzing and redressing, the LOGCAP IV contracts were finally awarded in April 2008.

The manhours required for each of the services' current CAPs is simple to determine. Informants provided the researchers with approximations of the number of employees and number of days required. Further, informants noted that approximately one-fifth of the total number of employees worked the acquisition as their sole duty, and the remaining four-fifths worked as an additional duty and/or only during stages of the process that required their expertise (e.g., technical representatives were involved in the requirements generation and evaluation processes, but not in the development or posting of the RFP itself). Using an average of eight hours per day for one-fifth of the employees and two hours per day for the remaining four-fifths in each acquisition, the calculations yielded total manhours of 138,240 for the LOGCAP IV, 10,080 for the GCCC, 25,380 for the GCSC, and 152,520 for the AFCAP III, as shown in Table 8. The differences in

manhours reflect the breadth of the requirements and the size of the program (the GCCC and the GCSC are small programs compared to the LOGCAP or even the AFCAP). The total manhours for all programs is 326,220, or the equivalent of 40<sup>5</sup> full-time equivalent (FTE) employees working 8 hours per day on the program for approximately 41 months (3.4 years) (assumes 25 days of work per month). These estimates do not include the possibility of protest, the number of protests, or any variables other than the time required to produce one acquisition plan and perform one source selection.

Estimated Manhours Required for Individual CAP Acquisition Planning and Source Selection						
Program & Contract	Number of Employees Required	x	Number of Hours per Day	x	Number of Days Required	= Number of Manhours
LOGCAP IV	12 Full Time	x	8	x	720	= 69,120
	48 Part Time	x	2	x	720	= 69,120
<b>TOTAL LOGCAP IV</b>						<b>= 138,240</b>
GCCC	3 Full Time	x	8	x	210	= 5,040
	12 Part Time	x	2	x	210	= 5,040
<b>TOTAL GCCC</b>						<b>= 10,080</b>
GCSC	6 Full Time	x	8	x	270	= 12,960
	23 Part Time	x	2	x	270	= 12,420
<b>TOTAL GCSC</b>						<b>= 25,380</b>
AFCAP III	10 Full Time	x	8	x	930	= 74,400
	42 Part Time	x	2	x	930	= 78,120
<b>TOTAL AFCAP III</b>						<b>= 152,520</b>
<b>TOTAL ALL PROGRAMS</b>						<b>= 326,220</b>

Table 8. Estimated Manhours Required for Individual CAP Acquisition Planning and Source Selection

The normative manhours required for a single JCAP was more difficult to determine because no two of the four programs are exactly alike. Each is unique in its size, complexity, breadth of capabilities, and acquisition practices of the owning service. Because a JCAP does not currently exist, the estimations used to predict the number of

<sup>5</sup> 40 FTEs was chosen as an evaluative figure based on the rounded average of total employees in Table 8 (156 total employees/4 programs = 39 FTEs).

manhours necessary for formulating and acquisition strategy and source selection is difficult. The researchers took a conservative approach by assuming the hours required for JCAP would be similar to those of the program with the largest number of manhours. In this case, AFCAP III had the largest amount of manhours spent in acquisition planning and source selection, and therefore serves as the conservative estimate for a JCAP. Using the same figures as AFCAP III, above, JCAP is estimated to take 152,520 manhours to plan and select contractors, as shown in Table 9 below. This is the equivalent of 40 FTE employees working 8 hours per day on the program for approximately 19 months (1.6 years) (assumes 25 days of work per month). As is evident, the total manhours saved by using JCAP is potentially 173,700 hours for each iteration of the program's contract. This is a savings equivalent of 40 FTE employees working 8 hours per day on the program for approximately 22 months (1.8 years) (assumes 25 days of work per month) for each iteration.

The average program office grade is GS-12, which was computed by averaging the pay grades of all the program office employees for all three programs (based on organization charts provided by informants). This estimate includes converting military positions into equivalent civilian grades. At base pay of \$76,627 per year<sup>6</sup>, not including fringe benefits, the average savings using a JCAP is \$5.5M<sup>7</sup> per acquisition planning and source selection iteration. The manhours and money freed by forming a JCAP could be directed to other service-specific acquisitions, such as major weapons systems or transformation efforts such as strategic sourcing.

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<sup>6</sup> From the U.S. Office of Personnel Management (OPM) General Schedule (GS) Salary Calculator using Grade of GS-12, Step 5, Locality "Rest of U.S."

<sup>7</sup> Calculated by multiplying the annual wage \* 40 FTEs \* 1.8 years.

Projected Manhours Required for JCAP Acquisition Planning and Source Selection						
Program & Contract	Number of FTEs Required	x	Number of Hours per Day	x	Number of Days Required	= Number of Manhours
JCAP	10 Full Time	x	8	x	930	= 74,400
	42 Part Time	x	2	x	930	= 78,120
<b>TOTAL JCAP</b>						<b>= 152,520</b>
<b>TOTAL ALL PROGRAMS (Table 8)</b>						<b>= 326,220</b>
<b>TOTAL MANHOURS SAVED</b>						<b>= 173,700</b>

Table 9. Projected Manhours Required for JCAP Acquisition Planning and Source Selection

### 3. Planning for New Requirements

Due to the contingent nature of the CAPs, new requirements occur daily. There is a large difference in the way each service processes new requirements. Each process will be described, and a manhour assessment will be performed. Table 10 provides the results of this assessment. All manhours are best estimations based on information received from informants and are averages of both routine requirements (which tend to follow the normal course of approvals and take longer) and emergency requirements (which generally skip many of the approval levels and are processed more quickly).

Manhours of Planning Required for New Requirements—Individual CAPs						
Program & Contract	Number of FTEs Required	x	Number of Hours per Day	x	Number of Days Required	= Number of Manhours
LOGCAP IV	10	x	8	x	60	= 4,800
GCCC	15	x	8	x	14	= 1,680
GCSC	9	x	8	x	30	= 2,160
AFCAP III	5	x	8	x	29	= 1,160
<b>Total Manhours</b>						<b>9,800</b>

Table 10. Manhours of Planning Required for New Requirements—Individual CAPs

The Army is in the process of transferring the single-award LOGCAP III to the multiple-award LOGCAP IV. The LOGCAP IV takes a regional approach to awarding TOs. In other words, the multiple contractors will compete to provide capabilities for geographical areas such as “Northern Afghanistan” or “Kuwait.” The competition results in one contractor winning the award to perform capabilities in their designated region. This provides the incumbent Commander with better unity of command as a large majority of his units’ support requirements will be provided by a single contractor. Additionally, it allows the Commander to maintain better positive control over the contractor employees in his area of operations (AO). Once a contractor has been awarded the requirements for that region, they are responsible for providing the wide range of LOGCAP capabilities in support of the units in the region (i.e., from food services to logistical transportation). LOGCAP TOs have broad SOWs and an operating budget that is meant to fund all the SOW requirements for the TO’s duration (generally six months to one year). New requirements necessitate additional funding and may require an addition to the SOW.

For example, requirements that are within the scope of a specific TO and are currently “turned on” (i.e., currently being performed), no new SOW is necessary. For example, at FOB Good Times, the contractor has been performing operations and maintenance (O&M) services on all the existing buildings and structures. The task of O&M is within the scope of the TO and it is “turned on,” or currently being performed. The contractor keeps a list of all the buildings and structures they are responsible for operating and maintaining. Now assume that the U.S. Army Corps of Engineers recently completed a multi-million dollar dining facility for the FOB. To ensure it does not fall into disrepair, the customer requests for the LOGCAP contractor to add this building to their list and begin performing O&M services.

The supported unit works with the local LOGCAP Support Unit (LSU), an organization designed to assist users/customers with capturing, organizing, and securing funding for LOGCAP requirements. The LSU consists of a number of LOGCAP Support Officers (LSOs), typically Army Reservists, who, like the ACOs, are responsible for the requests and requirements of a segmented part of the area of operations (i.e., the LSO and

ACO work together to support a certain number of FOBs). Working in conjunction with the ACO, the LSO helps the customer fully define their requirement, produce a SOW, and request a Project Planning Estimate (PPE) from the contractor. The PPE is a planning tool where the contractor provides detailed cost and schedule information to the Government so they (the Government) can make a decision whether or not to provide the funds to add the requirement to the TO. Once the requirement is submitted, the LOGCAP contractor inspects this building for proper construction (and fixes any deficiencies prior to accepting it) and ensures they have adequate manpower (i.e., sufficient number of plumbers, electricians, HVAC specialists, etc.) to properly maintain it. If the construction is sound and the manpower is available, the contractor adds the building to the O&M list and begins performing O&M functions. This requirement did not necessitate a new SOW, because the work associated was already within scope of the TO *and* “turned on.” It is now part of the contractual TO requirement.

If the construction is not sound and requires a significant amount of work to make it safe and operable (which is oftentimes the case with construction performed by host country nationals, or HCNs), then the contractor develops a cost estimate to repair the building and the supported unit decides whether or not the building repair is worth funding. Additionally, if sufficient contractor manpower is not available, the contractor develops an estimate of how many additional personnel are needed, which is presented to the supported unit for the funding decision. Note that buildings are generally added in bulk – it is not simply a one-for-one process (i.e., 20 new buildings requires one additional plumber and one electrician for maintenance; rather than each new building needing one additional plumber and one electrician).

The process is more difficult for new requirements that are in the scope of the base contract but are not “turned on” for the TO. These requirements require an addition to the TO’s SOW and additional funding. Again, the supported unit works with the local LSU to produce a SOW and request a PPE from the contractor. When technical experts are available, the Government will also build an independent Government estimate (IGE) in order to compare cost expectations. Once the customer and contractor reach an agreement concerning requirement expectations and cost, the unit provides funding and

the ACO adds the requirement to the TO. Upon expiration, the TO is re-negotiated inclusive of all the continuing “new requirements” that were added throughout the period of performance. In this process, the emerging needs of the customer are added to the TO incrementally throughout the year, and a “sweep” of requirements is performed during each TO re-negotiation to solidify the inclusion of the “new requirements” as continuing requirements.

The majority of work for new requirements on a LOGCAP TO is performed in theater, hand-in-hand with the customer and contractor. The PCO is involved when large, substantive changes will be made or if there are issues that arise in the process of capturing and defining the requirement. The PCO receives every change, regardless of size or complexity; however he/she may not know about the change beforehand, unless, again, it is substantive or has issues. Handling the processing of new requirements in theater decreases the amount of time necessary to communicate and define the requirement (especially considering the differences in work schedules and time zones between the PEO and the CAO), and can provide greater flexibility and potentially faster response time to the customer. However, this method places a large amount of trust and control in the hands of the CAO. This can cause problems because CAO representatives rotate in and out of theater every six to twelve months, whereas the PEO representatives are in place continuously for many years. First time CAO representatives experience a steep learning curve and can potentially make costly mistakes in the performance of their duties. This is a risk that is accepted in this program, and both the PEO and CAO do their best to manage and mitigate the risk.

To add new requirements to the Navy’s GCCC/GCSC programs, much of the work is performed at the CONUS PEO. When the need for a new requirement emerges (either CONUS or OCONUS), the NAVFAC contacts the operations department of the PEO and they begin to develop a project plan (e.g., establishing a new base in Djibouti). The Capital Improvements and Public Works technical experts get involved to develop a basic scope of the project. Once the scope is established, the Contracting Officer develops an RFP and presents it to the multiple contractors within the GCCC or the sole contractor within the GCSC. The contractors compete (where applicable), the proposals



are reviewed, and a winner receives the awarded TO. However, in the case of natural disasters, the contractor will generally accompany the Contractor Officer to the site and the Contracting Officer will issue technical directives to get the contractor to work immediately. Later, the Contracting Officer revises the TO and incorporates all the technical directives in order to capture the requirements and work that was performed.

The GCCC and GCSC are able to perform in this manner because the programs are small enough (relative to the LOGCAP) that each requirement can be handled by the respective PEO (versus a delegated CAO). By performing the majority of work in the PEO, the GCCC and GCSC are able to take advantage of the experience and continuity of their CONUS employees. This reduces the risk of faulty administration at the contingent site (e.g., when administrators continuously rotate in and out of theater approximately every six months, as is the case with the LOGCAP, the lack of continuity causes the TO to “stall” while the administrator is brought up to speed on the full scope of the TO and previous contractual actions. Due to the generality of the requirements and the latitude for interpretation, the TO may be handled in a looser or stricter manner, depending on the personality and experience of the administrator. Or, the administrator may initially make contractual mistakes based on his or her unfamiliarity and inexperience with the program or contract administration). However, it may also increase the amount of time it takes to get the requirement on contract because of potential differences in time zones and extended lines of communication.

The Air Force’s AFCAP TOs have more specific SOWs than those of the LOGCAP. The AFCAP TOs address specific needs of specific units; as such, the majority have fixed dollar values and fixed time periods. They do not encapsulate regional needs like the LOGCAP IV TOs. When a new requirement arises, the user works directly with the PEO to develop a SOW. The SOW is competed among the multiple AFCAP III contractors, and the winning contractor is responsible for fulfilling the requirement. Once awarded, changes to AFCAP TOs are handled via equitable adjustments; however, the changes are generally fewer and of smaller scale than those associated with the LOGCAP TOs.

Work is handled fairly equally between the PEO and the CAO for new requirements on an AFCAP TO. The CAO may assist the customer in developing their SOW, but the PEO has the responsibility of competing the requirement among the multiple contractors and selecting the successful offeror. Handling the processing of new requirements in CONUS has the potential to increase the amount of time necessary to communicate and define the requirement (again, given the differences in work schedules and time zones between the PEO and the customer), and provides less flexibility and potentially slower response time to the customer. However, this method ensures the PEO understands every requirement and preserves program standardization and integrity since PEO representatives are in place continuously for many years. This method is effective for the AFCAP because it is small relative to the LOGCAP.

Whether or not a JCAP would be more cost-effective in the area of adding new requirements to a TO is difficult to determine because it would involve either picking one of the methods listed above (performing the majority of new requirement work CONUS at the PEO or OCONUS at the CAO), or developing a new method. Regardless of the method chosen, the efficiencies gained by combining into a JCAP occur in the area of standardization. Developing a standard process for adding new requirements to a TO would simplify the duties of the PEO and CAO, hopefully resulting in better, more complete TO administration.

Standardized training could be accomplished with both the administrators and customers prior to deployment to ensure they understand the process. This would lessen the “drinking from the fire hose” effect that occurs upon arrival in theater. Once a person has deployed once as an administrator or user of the JCAP, they will have a general understanding of the process. In the current situation, for instance, if you are an ACO at a location that has both LOGCAP and AFCAP TOs, you must learn (and convey to your customers) both processes for adding a new requirement to the TO. This is difficult and time consuming for both the administrator and the customer. Finally, having one process would help manage customer expectations regarding how much time it takes to get a new requirement added. As users get familiar with the program, they will know approximate

lead times and costs associated with their requirements. Developing this standardized knowledge has the potential to improve administration and understanding of the program.

#### **4. Organizational Culture**

While the acquisition and source selection process itself is essentially the same for each service, the type of requirements can and do differ among the services. Similarities result from regulatory (e.g., Federal Acquisition Regulation) and statutory procedures (e.g., Competition in Contracting Act) that prescribe the stringent requirements and processes each service must follow to award contracts. Although the general process is the same, the requirements input can be very different. For instance, the Army does not require MILCON-level construction in its CAP contract because it has the U.S. Army Corps of Engineers (USACE) to perform large-dollar construction. The Navy's program is not permitted to operate in actively hostile areas, so using the GCCC or the GCSC in hotbeds such as Afghanistan or Iraq is not possible. As evidenced, the requirements vary because of the differences in services' cultures.

Furthermore, the way new requirements are added to the TO or contract vary amongst the services. It is apparent that the Army prefers to work hand-in-hand with the CAO and the contractor *on the ground* to help develop and add new requirements. This method works; however, studies suggest the Army is not performing their planning as efficiently and as effectively as possible (United States Government Accountability Office, 2004). Army Regulation 700-137 notes that "MACOMs must evaluate each function, define the acceptable degree of risk, and balance its military and contractor support mix accordingly. Advanced acquisition planning can reduce the risk by providing redundancy and multiplicity of sources of support" (Headquarters, Department of the Army, 1985, p. 3) and repeatedly mentions the need to include LOGCAP administrators and contractors into the mission planning process. However, in their 2004 report "DOD's Extensive Use of Logistics Support Contracts Requires Strengthened Oversight", the GAO noted "LOGCAP planning was still often ineffective, partly

because the Army did not include the contractor in its planning, notwithstanding guidance to the contrary” (United States Government Accountability Office, 2004, p. 2).

Furthermore, a 2008 GAO report pointed out the risks associated with allowing contractors close access to inherently governmental functions. It noted, “The closer contractor services come to supporting inherently governmental functions, the greater the risk of their influencing the government’s control over and accountability for decisions that may be based, in part, on contractor work. This may result in decisions that are not in the best interest of the government, and may increase vulnerability to waste, fraud, and abuse” (U.S. Government Accountability Office, 2008, p. 6). The risk of a contractor performing inherently governmental functions can be reduced by clearly articulating the job descriptions of contractor employees and by providing specifically detailed requirements for contractor performance. The Army must be keenly aware of the functions they are asking the contractor to perform in the requirements planning process, lest they cross the “inherently governmental” line.

Speed and flexibility are of utmost importance to the Army, and that is why they try to include the contractor in the requirements planning process. Their process is similar to Alpha Contracting, which is a framework that expedites the acquisition process by establishing a partnering relationship between the Government and the contractor to streamline the acquisition process. Both parties work together to perform necessary steps (e.g., SOW development, pricing the work, and preparing the contract) in parallel instead of serially. Parallel performance is achieved without compromising a fair and reasonable price or violating the requirements process. The Army is able to perform in this manner because their TOs are regionally designed; therefore, once a TO is awarded to one contractor, there is no further competition of requirements for that region until the TO expires. In other words, the contractor providing input in the planning process is the contractor who will perform the work.

The Navy and the Air Force prefer to develop and add new requirements by working largely with the PEO and using minimal contractor input. The emphasis for the Navy and Air Force is on continuity, control, competition among short-term requirements, and acquisition integrity. They are able to perform in this manner because

their TOs are functionally designed; therefore, each new requirement (or function) necessitates a new TO competition and award.

## **5. JCAP Efficiencies**

How is planning affected by a JCAP? The Acquisition Planning and Source Selection process would be largely unaffected if a JCAP were implemented. The rules and regulations of the FAR make the process uniform; therefore, planning and sourcing a JCAP is not different from planning and sourcing the individual CAPs. The advantage of implementing a JCAP is that the planning and source selection process, which takes several months, would be required only once, not four separate times for similar requirements. This has the potential to save 173,700 manhours, or the equivalent of \$5.5M, per contract iteration.

Planning for New Requirements would be affected because the services would have to agree to *how* and *where* new requirements will be handled. Choosing one of the existing methods would require the other services to make cultural changes to adapt to the new style. Or, if a completely new method is developed, all three services must adapt to the new style. To ensure unity of command and to limit the number of contractor-to-contractor interactions, it would be best to follow LOGCAP's format of competing and awarding regionally-based TOs. However, to maintain program continuity and integrity, it would be best to follow the Navy and Air Force's method of defining the requirement with minimal contractor input. The contractor could still be involved, of course, however they would serve as technical experts providing advice rather than technical experts defining the requirements. The efficiency of a JCAP is that it will save \$5.5M per contract iteration and will allow the best planning practices of each service to be implemented into a single program.

## **C. CEA: CAPABILITIES PROVIDED**

The capabilities provided by a CAP are the most important functions of the programs. CAPs exist solely to fulfill logistical support needs that the military services can no longer perform because of limited manpower. This section will review the gaps in the capabilities available for each CAP and the amount of overlap in the capabilities

available between the CAPs. It will define the research question associated with capabilities provided and how the CEA will be performed.

## **1. Research Question**

The research questions, “What efficiencies are gained by combining the support requirements of the individual services into one JCAP?” and “Which areas of duplication can a JCAP eliminate?” aim to determine where gaps and overlaps occur between the four individual CAPs. Areas considered gaps by one program might be fulfilled by using a different program, or might be better served by one all-encompassing JCAP. Areas of overlap may result in excessive, expensive duplication of effort that could be eliminated by using a single JCAP.

In order to perform a CEA on maintaining four individual programs versus one JCAP, this study evaluated the types of capabilities provided under each individual program. The metric for evaluation involves categorizing the capabilities of each program under a general title and determining the number of gaps and overlaps that exist. This study recognizes that although a service title does not capture the finer details of the capabilities, the rudiments are common among the CAPs. For example, the service of food preparation must follow the sanitation standards found in the Technical Bulletin titled “Occupational and Environmental Health Food Sanitation,” also known as TB MED 530. This technical bulletin provides the baseline for the handling, labeling, preparation, protection against contamination, storage of, and transportation of food. This study is not evaluating how the service is performed, but rather noting the overarching function of the basic function. The researchers recognize that potential variance in standard operating procedures may exist between military services. Once the capabilities have been categorized, gaps and overlaps in the capabilities provided are easily identified. The implications of the gaps and overlaps are discussed in the following sections.

## **2. Gaps in Capabilities Available**

Logistical capabilities comprise the support capabilities that collectively enable the U.S. to rapidly provide “global sustainment for our military forces. Logistics services

include many disparate activities that are highly scalable capabilities. Included in this area are food, water and ice, base camp, and hygiene services” (JP 4-0, p. xiv). The LOGCAP IV contract includes Base Life Support (BLS), Theater Transportation Mission (TTM), and Corps Logistics Support Services (CLSS) operations. The principal effort of the AFCAP is to provide deployment capabilities generally aligned with Air Force functions associated with limited base operating support, specifically the Civil Engineer and Services career fields. The scope of the GCCC encompasses construction tasks including, but not limited to, power plant and power distribution construction, water treatment plant construction, water well drilling, airfield construction, pier construction, troop billeting facility construction, and bridge and road construction. The GCSC provides BLS functions similar to those of the LOGCAP and the AFCAP. It is pertinent to note that each program “specializes” in certain functions due to the nature of its structure and the support requirements of the program. For instance, the Navy and Air Force structured their programs to provide light and heavy engineering and construction capabilities to augment the Seabees and the RED HORSE, respectively. Therefore, the GCCC and the AFCAP “specialize” in engineering and construction capabilities. In the same respect, the LOGCAP does not specialize in engineering and construction efforts because the Army relies on the USACE to perform those functions. The following table, Table 11, displays the capabilities provided under each program, and highlights the gaps in scope that exist between the four programs. The GCCC and GCSC are evaluated together in this section because the Navy has control over the use of both in any given contingency.

Gaps in Capabilities Provided by Program			
<b><u>CAPABILITY</u></b>	<b><u>LOGCAP</u></b>	<b><u>GCCC/GCSC<sup>6</sup></u></b>	<b><u>AFCAP</u></b>
Food Service	X	X	X
Construction (Light)	X	X	X
Construction (Heavy)		X	X
Supply Class Operations	X		X
Billeting/Lodging	X	X	X
MWR	X	X	X
Operations & Maintenance	X	X	X
Transportation	X	X	X
Engineering	X	X	X
Signal Support Services	X		X
Power Generation & Distribution	X	X	X
Fuel Operations	X		X
Utility Plant Operations <sup>1</sup>	X	X	X
Fire Protection <sup>2</sup>	X		X
Trades <sup>3</sup>	X		X
Laundry Operations	X	X	X
Individual Augmentation <sup>4</sup>	X	X	X
Hazardous Material <sup>5</sup>	X		X
Notes: <sup>1</sup> Utility Plan Operations includes water treatment, sewage, solid waste disposal, etc. <sup>2</sup> Fire Protection includes both structural and aircraft protection and prevention services <sup>3</sup> Trades includes carpentry, plumbing, electrical, mechanical (e.g. refrigeration, air conditioning, heat) that are performed on a continual basis (vice one-time during construction). <sup>4</sup> Individual Augmentation is the process of writing a Task Order for additional personnel support <sup>5</sup> Hazardous Material: receipt and storage only <sup>6</sup> Non-hostile areas only—creates capability gaps			

Table 11. Gaps in Capabilities Provided by Program

Table 11 shows that seven of the 18 capabilities are “gaps” in one of the programs. One-third of the capabilities depicted are not available to the Navy under the GCCC/GCSC programs. The breadth of capabilities would remain the same under a joint program. The consolidation of all capabilities under one program is a feasible solution



and it ensures that no existing capabilities are lost in the transition from individual CAPs to a single JCAP. This study shows that all necessary capabilities are available via two or more of the CAPs. A joint program would include all these capabilities (making all functions available to all of the military services) while consolidating capability and overhead costs under one program.

The existing gaps in available capabilities, presents several issues for individual programs, particularly in contingency situations. Several examples exist where an individual service's programs failed to meet the needs of the warfighter or supported personnel. The first example is derived from the Navy's CONCAP program during Hurricane Katrina relief operations. The CONCAP was effective in responding to a preponderance of construction requirements, but lacked the ability to provide essential life support capabilities due to a narrow, construction-oriented scope of work. The CONCAP was used to build temporary living shelters for displaced victims of the hurricane, but they could not provide the capabilities associated with bed-down (i.e., purchasing beds, linens, and other supply items), nor could they provide billeting functions to assign people to temporary shelters. The program provided the functions (with good intent) despite being out of scope. There are, of course, potential legal ramifications associated with consistently performing out-of-scope work; therefore, the Navy awarded separate construction and support programs (the GCCC and the GCSC) to address the capability gaps in the CONCAP contract. However, many of the capabilities the Navy added via the GCSC already existed under the LOGCAP and the AFCAP. Despite these changes, gaps remain in both GCCC and GCSC.

The second example concerns gaps that result from the Army's internal construction arm, the U.S. Army Corps of Engineers (USACE). The Army does not allow the LOGCAP to provide heavy, MILCON-level construction capabilities because the functions already exist in the USACE. The Army has been criticized for justifying construction (e.g., dining facilities) as "incidental to services." In other words, the LOGCAP has been used on several occasions to build a non-permanent dining facilities (using O&M funds vice MILCON dollars, as MILCON dollars are not available on the LOGCAP) in order to perform food services, an inherently LOGCAP function.

Naturally, the contractor tasked with providing functions (such as food service operations) prefers to design and build their own dining facility so they have the control necessary to ensure the building meets their servicing needs. The only heavy construction alternative for the Army is their low-density, high-demand USACE arm. In fluid environments, such limitations have the potential to hinder operational missions. A JCAP could eliminate this problem by ensuring that heavy construction (as well as all other current support capabilities) is available to every service under one program.

To reduce the difficulties associated with these existing capability gaps, the contracting workforce must be knowledgeable about the full range of support functions available within each of the four programs. A knowledgeable, experienced contracting professional has the tools to understand the functionality and capabilities available under each individual program and the ability to use each program to fulfill requirements. However, as the Gansler Report (2007) pointed out, “In spite of the large increases in workload, the increased complexity of the contracts, and the increased tempo required, there has been a dramatic reduction in the capability of the Army to meet this challenge...[T]his combination represents a ‘perfect storm’ in Army contracting.” Under a joint program, a contracting professional has every conceivable contingent capability available to them and reduces the difficulties in networking through other services to get effective and timely action. The notion of a joint program is that all capabilities are available in a contingent situation and they are selected and implemented as needed. The more resources available to a commander in a contingency environment, the more effective he/she will be in fulfilling the operational mission.

A joint program office will appear different than current program offices, in that the organizational size would likely increase within the single joint office (i.e., there will likely be more workers in a JCAP PEO than in any one of the current CAP PEOs); however, the total number of personnel required to operate the programs would decrease as the number of PEOs shrinks from four to one. Centralizing program operations into one office will help the administrators maintain positive control over requirements and allow for processes to be standardized.

### 3. Overlaps in Capabilities Available

Table 12 highlights areas of overlap where the same capabilities are currently being performed by two or more programs.

Overlaps in Capabilities Provided by Program			
<b><u>CAPABILITY</u></b>	<b><u>LOGCAP</u></b>	<b><u>GCCC/GCSC</u></b>	<b><u>AFCAP</u></b>
Food Service	X	X	X
Construction (Light)	X	X	X
Construction (Heavy)		X	X
Supply Class Operations	X		X
Billeting/Lodging	X	X	X
MWR	X	X	X
Operations & Maintenance	X	X	X
Transportation	X	X	X
Engineering	X	X	X
Signal Support Services	X		X
Power Generation & Distribution	X	X	X
Fuel Operations	X		X
Utility Plant Operations <sup>1</sup>	X	X	X
Fire Protection <sup>2</sup>	X		X
Trades <sup>3</sup>	X		X
Laundry Operations	X	X	X
Individual Augmentation <sup>4</sup>	X	X	X
Hazardous Material <sup>5</sup>	X		X
Notes: <sup>1</sup> Utility Plan Operations includes water treatment, sewage, solid waste disposal, etc. <sup>2</sup> Fire Protection includes both structural and aircraft protection and prevention services <sup>3</sup> Trades includes carpentry, plumbing, electrical, mechanical (e.g. refrigeration, air conditioning, heat) that are performed on a continual basis (vice one-time during construction). <sup>4</sup> Individual Augmentation(s) is the process of writing a Task Order for additional personnel support <sup>5</sup> Hazardous Material: receipt and storage only			

Table 12. Overlaps in Capabilities Provided by Program

Each of the critical capabilities is provided by at least two CAPs. A full 67 percent are available under each CAP. Using a JCAP, there would be one entity responsible for providing these capabilities in a contingency environment. Again, a joint program would include all these capabilities (making all functions available to all of the military services) while consolidating capability and overhead costs.

A reduction in duplication of capabilities may provide relief in oversight and program administration as standardization increases. For example, food service operations are provided under three programs (i.e., LOGCAP, GCSC, and AFCAP) with different contractors using different performance and quality criteria. From an efficiency viewpoint, a joint program would consolidate these efforts under one oversight/management entity and provide the path for program standardization and customer familiarization. Additional efficiencies include performing under a single, standardized SOW, implementing standardized inspection processes, having one performance standard (to control expectations), and standardizing the assignment and management of CORs. The U.S. Merit Protection Board issued a report in 2005 that shows that 25 percent of the CORs surveyed were not formally delegated the authority to perform their contracting work. This is a problem that is common to all the services and agencies involved in contingency contracting. The report links proper COR assignment and experience to successful contract administration. The study shows that ensuring CORs are assigned, trained, given ample time to execute their COR duties, and rated on their performance significantly improves contract quality, timeliness, completeness, and cost (U.S. Merit Systems Protection Board, 2005).

Where multiple programs are co-located in theater, accountability for contractor actions and/or incidental errors creates a perpetual chain reaction of contractors blaming each other for support failures. For example, one informant spoke of a situation in Iraq in which the LOGCAP and the AFCAP served separate, yet critical, functions in providing hygiene capabilities within the camp. An AFCAP contractor was responsible for maintaining water tanks and pumps on shower units, whereas a LOGCAP contractor was responsible for ensuring that the tanks were filled with water. If the LOGCAP contractors missed a water drop, the pump operated and maintained by the AFCAP

contractors would burn out. Water pumps were continually being damaged, and the contractors were quick to blame each other for lack of performance. These types of contractor-contractor interfaces have the potential to cost the Government additional money (i.e., to remove, replace, and maintain new tanks and pumps). Under one program, these sort of contractor-contractor interfaces would be minimized and performance could be directly linked to one contractor.

In another example, an informant spoke of a situation in Afghanistan in which an AFCAP contractor was used to expand an airfield by several hundred thousand square feet. Construction was performed in the spring and summer due to the inclement weather Afghanistan experiences during the winter. Unfortunately, despite the fact that all entities (the AFCAP contractor, the LOGCAP contractor, and the supported units) witnessed the construction, coordination between the contractors was not addressed. When the airfield expansion was completed in the late fall, the LOGCAP contractor had not been approved to purchase the additional runway de-icing material, snow clearing equipment (which required Other Procurement—Army, or OPA funds, not the O&M funds that is used by the LOGCAP), and additional personnel necessary to maintain the expanded area. Gaps in communication would be minimized using a JCAP, since one contractor would be responsible for all aspects of a project—from construction to maintenance and support.

In another example, the same LOGCAP contractor was working under the guidance of two different services' commanders. At an airfield in Afghanistan, the Arrival/Departure Airfield Control Group (A/DACG)—an Army function—was collocated with the Aerial Port Squadron (APS)—an Air Force function. The collocation was necessary because the base did not have enough demined territory close to the airfield to provide land for both functions. As such, the LOGCAP contractor was forced to navigate their duties between the Army and the Air Force. Each service performs their functions differently; thus, the contractor was constantly put in the situation of wondering which commander's direction to follow.

Both units were responsible for cargo arriving and departing the airfield. In several instances, materiel was not placed in the proper grid location (i.e., numbered locations in the lay-down yard where materiel is received, annotated as having arrived, and either picked up by the receiving units or pushed forward to a different FOB). Improper placement caused materiel to be “frustrated” (not properly documented and therefore stalled in transit). Frustration of material can lead to potentially costly situations (e.g. forwarding of ammunition for units in combat is delayed, a unit does not receive essential safety items, unclaimed items are shipped back to their origin, repurchase of “missing” materiel, etc.). In this particular case, the base experienced delays in sending ammunition, inability to account for missing materiel (likely caused by lot theft), excess/unclaimed materiel (including F-15 jet aircraft engines valued at approximately \$3.5M each (GlobalSecurity.org) made useless by the amount of time spent exposed to the elements), and hazardous or combustible materiel being accidentally located in the same location as ammunition. These issues were the result of one contractor essentially reporting to two different commanders. Having one JCAP would provide unity of command between the services, as they both would be following the same TO and SOW.

Ideally, a joint program would support the strategic sourcing goal set forth by Shay Assad, the Director of the Defense Procurement Acquisition Policy (DPAP) and Strategic Sourcing. “Strategic sourcing is a proven best practice and represents how the DoD will acquire goods and services moving forward. It is the collaborative and structured process of analyzing an organization’s spend and using the information to make business decisions about acquiring commodities and services more effectively and efficiently” (Defense Procurement and Acquisition Policy, 2009).

For example, the supply lines running in and out of the major theaters of operation can be streamlined to reduce transportation costs. In terms of air and naval cargo assets, the reduction from multiple, smaller lines to a major, large line increases the efficiency and effectiveness of supporting forces within theater. Reduction of lines is not possible under the current four-CAP construct because each of the programs is competing for space in the supply lines. They not only compete with each other, but with smaller,

individual contractors. By combining into a single JCAP, the program would be able to coordinate the moves of the most important supplies, thus ensuring critical items arrive faster. Additionally, at the command level, the commanders and command staff could have visibility into the supplies their regional contractor is ordering and where those supplies are in the logistical chain.

Another example of supporting the strategic sourcing goal lies in achieving economies of scale. Certain supply items are used at all locations. These items, such as lumber, copper wire, fiber optic cable, air conditioning units, generators, and material handling equipment (MHE) could be purchased in bulk and at volume discounts. Some items could be bulk-ordered by region (i.e., the contractor responsible for Northern Afghanistan orders enough fiber optic cable to fulfill the needs of his region), and others could be bulk-ordered for the entire program (i.e., the program determines specific brands or models of air conditioning units, generators, or MHE that the contractors will use and places a bulk order for all regions). Additional advantages of gaining economies of scale is the standardization of supplies. Standardization is especially important when ordering consumable parts for maintenance and repair and for personnel training purposes (e.g., a generator technician trains to repair three to five types of generators vice thirty or more). A 2006 study by Rudzki et al. found that strategically sourcing indirect materials and services can produce savings of approximately 10 to 20 percent (Rudzki et al., 2006). In a program the size of a JCAP, saving 10 to 20 percent on indirect materials and services is a significant accomplishment.

#### **4. Organizational Culture**

The biggest cultural consideration involved with consolidating into a joint program involves confronting the loss of control each service will experience when they no longer are the sole owner of “their” program. Currently, the services are empowered to control their own, service-specific CAP. With a joint program, the services lose some control over decision-making and responsiveness to their individual needs. Under a joint program, the responsibility of decision-making falls on a multi-service contracting entity that is also responsible for prioritizing all requirements.

A requirements board known as the Joint Acquisition Review Board (JARB) currently exists in theater. At the JARB, new requirements are presented, defended by the requirement owner, and voted on by the board. The board consists of theater-level decision makers such as the J4, J7, and J8. If a requirement passes the board, it is prioritized for contractor action (by the same individuals) to ensure mission-critical needs are met before lesser requirements. The JARB is *supposed to* have jurisdiction over all contracting requirements in theater as well as jurisdiction over how those requirements will be fulfilled (e.g., by using the LOGCAP, the AFCAP, the JCC-I/A, etc.). However, the reality is that many requirements escape the JARB's purview because they are coordinated with outside entities (i.e., the unit or customer contacts a familiar contracting entity in CONUS to fulfill their requirement).

For instance, if the Army has Base Operating Support Service (BOSS) responsibilities for a certain FOB, the Air Force must request support through the JARB. If the JARB denies the request, or if the Air Force determines the request will wait too long in queue before execution, they can essentially coordinate directly with the AFCAP PEO to fulfill the requirement. This ability to directly coordinate undermines the process efficiency intended by the JARB. It also results in a lack of control over contracting actions being performed in a Commander's AO. While the JARB process is not perfect, and users sometimes feel it adds a level of bureaucracy that stifles the intended efficiency of the CAPs, it is necessary to ensure program accountability (i.e., that the *users* make decisions regarding requirements and funding, not the ACO or program administrators), and to maintain control and responsibility for the contracting actions occurring in a Commander's AO, regardless of whether the requirement is sourced to the LOGCAP, the GCCC/GCSC, or the AFCAP.

A final aspect of organizational culture to consider is that of service equity. Currently there is only an informal system to establish urgency and time standards for requirement completion. For instance, each program may have time-sensitive categorizations to label requirements as "mission critical," "urgent," or "routine;" however one standard does not exist for requirements vetted through the JARB. Rather, when a requirement becomes "mission critical" it is placed at the top of the list and all



other requirements are moved lower on the priority list. If the requirements garnered from all supported units (regardless of service) were prioritized and labeled appropriately by the JARB members, contract administrators and the contractor could focus their resources on actions deemed most critical.

## **5. JCAP Efficiencies**

What efficiencies are gained by combining the support requirements of the individual services into one JCAP? Which areas of duplication will be eliminated by using a JCAP? By implementing a JCAP, 100 percent of the gaps in current programs could be filled and 100 percent of the overlaps among the programs could be eliminated. Using a JCAP to fill the scope gaps allows each of the services access to the same support functions. This ensures that the military services can meet any contingency mission—from light and heavy construction to the full range of capabilities—without delay. Overlaps in support capabilities can be eliminated by combining similar functions under one program, thus reducing duplicative efforts (e.g., multiple source selections) among the four CAPs. The final efficiency gained by a JCAP in the area of capabilities provided is the establishment of one performance standard for every service. One standard not only provides the contractor with clear guidance, it also allows the program administrators to objectively rate the contractor's performance and to manage the demands of the supported units.

## **D. CEA: FINANCIAL PROCESSES**

Financial processes are essential to the smooth operation of any program, CAPs included. This section will analyze two of the more complex areas of financing CAPs: (1) funding from sister services and (2) funding from coalition partners. It will define the research question associated with financial processes and how the CEA will be performed.

### **1. Research Question**

The research question, “How are financial processes affected by a JCAP?” aims to determine what financial processes, if any, would be affected by combining the

individual CAPs into a single JCAP. The analysis of funding from sister services examines the average number of Military Interdepartmental Purchase Requests (MIPRs) that were required each month for each CAP. The analysis of funding from coalition partners will explore the level of ease or difficulty involved in funding, accounting for, and receiving payment from various coalition partners for each of the CAPs. The level of difficulty is measured on a scale of one to five, with one being minimal level of effort, three being a moderate level of effort, and five being maximum level of effort. In both cases, the data were obtained and extrapolated from interviews.

## **2. Funding from Sister Services**

The MIPR is the DoD's method of transferring funding between the Army, Navy and Air Force. If one military service requires capabilities offered by a different military service, the first military service may use a MIPR to provide their own funding for capabilities acquired on the second military service's contract. For instance, imagine a contingency location where the predominant service is the Army. The Army contracts for base support functions at this location. Now imagine a small contingent of Air Force personnel arrives to perform limited air operations. Seeing no need to duplicate efforts, the Air Force uses the Army's dining facility, laundry services, and fuel. To pay for their portion of use, the Air Force and Army agree to a price for the capabilities used and the Air Force transfers "Air Force funds" to the Army for "reimbursement."

The transfer is performed via a DD 448, or a MIPR. MIPRs can only be executed between DoD services (Army, Navy, and Air Force). MIPRs cannot be executed between the DoD and DoS, or any other civilian agency. That is not to say that funds cannot be moved from DoS to DoD for use on one of the CAP contracts—indeed, they can. However, the process cannot be performed via a MIPR. The process occurs in a very limited number of cases; therefore, it was not considered in the scope of this study.

Table 13 provides the average number of MIPRs processed each year for each program. The number represents the average MIPRs based on information received and extrapolated from interviews. It might seem as though the AFCAP has an exorbitant amount of transactions compared to the other programs; however their high number is a

bit misleading. The AFCAP averages more MIPRs than the other programs, but each individual unit pays for their own TO and therefore must transfer funds to begin or modify a TO. The Accounting Classification Reference Numbers (ACRNs), or funding lines, are different for each Air Expeditionary Wing (AEW) in theater. Therefore, every time an AEW has a requirement that necessitates a new TO, a MIPR must be accomplished. Additionally, because the AFCAP TOs are written for specific, detailed requirements, any significant changes generally require additional funding, and therefore, a new MIPR. Furthermore, requirements can be open-ended or cost-based, in which case the unit must transfer funds each time the costs are definitized.

The GCCC and the GCSC follow the same guidelines as the AFCAP; however, their number of MIPRs is smaller because they have had less program activity in recent years. The LOGCAP, on the other hand, provides one funding stream for their programs via the supported unit. So, if the 82d Airborne Division owns the requirements for all of Afghanistan, then the funding comes from their ACRN. New requirements simply “pull from the pot” of existing money, rather than requiring a new MIPR. MIPRs for the LOGCAP and the GCCC and the GCSC generally come from outside use of the program (e.g., when the USAF chooses to use LOGCAP capabilities, they transfer funds to the contract via MIPR for pre-payment or reimbursement of support functions).

Average MIPRs Per Year Per Program		
LOGCAP MIPRs/Year	GCCC/GCSC MIPRs/Year	AFCAP MIPRs/Year
17	10	225
TOTAL MIPRs/Year		252

Table 13. Average MIPRs Per Year Per Program

Combining the services’ requirements into one JCAP would likely reduce the number of MIPRs required because up-front funding provided from each of the services would cover the majority of expenses incurred each month. If coordinated and tracked correctly, each service would only be required to process one MIPR/month for unanticipated requirements, for a total of 36 MIPRs/year.

Reducing the number of MIPRs, however, may not be the true efficiency source in the financial processes of a JCAP. The real efficiency may lie in the intangible area of financial processes—the amount of negotiation and trust required to make each service perceive they are getting a good deal. Using the example above, when the Air Force reimburses the Army each month for the capabilities they used, they want to know that they actually used what they are paying for. In some cases (especially large dollar projects), disputes occur when one service does not agree with the price estimated by the other service’s contractor. Essential work can, and does, stall until the parties can come to an agreement on price. Situations like this provoke mistrust among the services and can sour inter-service relationships. Having one JCAP gives each service more visibility into the “average” costs of projects and levels support expectations. Visibility and leveling would likely reduce inter-service funding disputes, thus saving time, effort and trust.

### **3. Funding from Coalition Partners**

Coalition partners, in the majority of cases, are also required to reimburse the supporting service for their CAP usage. The process starts when an Acquisition and Cross-Servicing Agreement (ACSA) is signed between the U.S. and the coalition partner. “[ACSAs] are bilateral international agreements that allow for the provision of cooperative logistics...[and] are intended to provide an alternative acquisition option for logistics support for exercises or exigencies” (Department of Defense, 2007, p. 11.2.3). Once signed, a standing agreement exists that allows the coalition partner use of the CAP in their region, provided CAP capacity is available for support.

Requests for new or additional support are processed in the same manner as requests from U.S. services; the only difference is the funding from coalition partners generally takes more time to arrive. The amount to be transferred depends on the amount of capabilities received or work performed by the CAP for the coalition partner. The supporting service and the coalition partner come to an agreement on the level of usage and the cost of capabilities to establish the transfer amount. Transfers can be periodic and recurring, as in the case of daily service usage (e.g., dining facilities, laundry, fuel,

etc.), or they can be one-time payments, as in the case of unique projects (e.g., building renovation, national holiday celebration, etc.). Table 14 presents the level of ease or difficulty of processing funding from coalition partners as reported by informants.

Coalition Partner Funding Level of Effort			
Informant*	1 – Minimal Level of Effort	3 – Moderate Level of Effort	5 – Maximum Level of Effort
A	X		
B		X	
C		X	
D		X	
E			X
F	X		
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>1</b>
*NOTE: GCCC does not perform functions for coalition partners; therefore, there were no Navy informant responses.			

Table 14. Coalition Partner Funding Level of Effort

The majority of informants agree that the level of effort required to handle coalition funding is minimal to moderate. Combining the individual CAPs into a single JCAP is unlikely to change this perception, since all the services are currently following the same procedures. However, efficiencies likely exist in learning the process to accept transferred funds from coalition partners. With a JCAP, there is only one program office, and therefore only one set of financial administrators who need to know the processes associated with coalition partner funding. Additionally, like the MIPR process, a JCAP would permit funding from coalition partners who are located in several regions (e.g., the British Army, Navy and Air Force in Iraq, Afghanistan, and the Persian Gulf) to be summed into one transfer. A JCAP could provide a better view of how often the coalition partners use the program and what they owe for reimbursement across all theaters of operation.

#### **4. Organizational Culture**

Financial processes are similar for each of the services. Regulations regarding MIPRs and ACSAs apply to all services within the DoD; therefore, there are no outstanding differences. There are no peculiar organizational culture considerations in the area of financial processes.

#### **5. JCAP Efficiencies**

How are financial processes affected by a JCAP? The number of financial transactions from sister services and coalition partners would be reduced. Each service or coalition member could provide a funding commensurate to their expected program use up-front; or, for more accurate reimbursement, the sister service or coalition partner could wait until the costs are definitized and provide periodic funding based on actual costs. By using a JCAP, costs could be totaled for each individual entity across all theaters of operation, thus reducing the amount of transactions and the possibility for errors.

Additionally, having one program office under a JCAP allows the funding process to be streamlined and funneled to a small number of financial administrators who are intimately familiar with the processes of both sister services and coalition partners. A final important financial benefit to using a JCAP is the ability to standardize labor rates. Rates would only have to be negotiated and checked for cost realism one time (vice four separate times) per iteration (i.e., annual or semi-annual updating). This would allow for better administration, as ACOs and customers would have just one set of rates to use during proposal review.

#### **E. CEA: COMMAND AND CONTROL**

Command and control of CAPs involves the coordination of both the PEO and CAO. This section will analyze two complex areas of command and control: (1) CONUS program administration and (2) OCONUS contract administration and oversight. It will define the research question and how the CEA will be performed.

## **1. Research Question**

The research question, “How are CONUS program administration and OCONUS contract administration and oversight affected by a JCAP?” aims to discover where areas of duplication exist and if the administration and oversight of the program and contracts could be improved by combining them into a single JCAP. CONUS program administration will analyze the number of FTEs required to maintain each program to see if there is excessive duplication. OCONUS contract administration and oversight will also analyze if personnel duplication exists and if the task of managing four different programs affects the quality of oversight.

## **2. CONUS Program Administration**

CONUS program administration encompasses all the activities of the PEO, including acquisition plan creation, contract award(s), TO awards, contract and TO administration, processing payments, award fee board preparation (when applicable), and TO and contract close-out. Because the majority of the day-to-day field administration is performed OCONUS, the program office also provides continuity while a series of ACOs, QARs, PAs, and supported units rotate in and out of theater.

Each program office is structured to support its individual program. The focus of our analysis is not to question whether or not the program office is staffed properly for the amount of work to be done; rather it is to determine whether duplication of efforts exists, and if it does, to what extent. Table 15 shows the number of personnel each program office has for each job specialty.

Program Office Staffing by Specialty						
Program*	Program Managers	Program Contract Managers	Property Admin	Technical Support	Admin Support	TOTAL
LOGCAP	2	7	1	0	2	12
GCSC	2	8	0	2	2	14
AFCAP	3	6	0	0	2	11
TOTAL	7	21	1	2	6	37
* No data from GCCC.						

Table 15. Program Office Staffing by Specialty

A quick glance at the numbers shows that duplication of effort indeed exists between the programs, most notably in the Program Manager and Contract Manager specialties. Establishing a JCAP will not eliminate all duplication of personnel; however, it could consolidate the most knowledgeable and most experienced personnel from each specialty. This would enhance overall program administration while reducing the cost associated with maintaining four different program administration staffs.

Table 16 shows the estimated amount of personnel from each specialty area needed to administer a program like JCAP. Conservative estimates were made on the basis that the program would be slightly larger than the LOGCAP office. This estimate assumes the number of theater requirements would remain the same overall; however, instead of meeting those requirements in a task-by-task, piecemeal fashion by four separate programs, requirements would be consolidated under large, geographically administered TOs (i.e., similar to the way the LOGCAP IV currently divides its TOs). Therefore, there will be fewer, larger TOs.



Joint Program Office Staffing by Specialty						
Program	Program Managers	Program Contract Managers	Property Admin	Technical Support	Admin Support	TOTAL
JCAP	3	8	2	2	3	18

Table 16. Joint Program Office Staffing by Specialty

The estimate is based off the current division of geographic locations: (1) Northern Afghanistan, (2) Southern Afghanistan, (3) Northern Iraq, (4) Southern Iraq, (5) “Middle East” (i.e., Kuwait, Qatar, Bahrain, and the United Arab Emirates), (6) “Horn of Africa” (i.e., Djibouti with the possibility of expanded operations in Africa as AFRICOM operations grow), (7) the Philippines, and (8) Eastern Europe (i.e., Georgia and Bosnia). For each geographic region, there would be one PCO assigned. Three PMs would manage the overarching regions: Middle East (to include Iraq, Kuwait, Qatar, Bahrain, and the United Arab Emirates), Southwest/Southeast Asia (to include Afghanistan and the Philippines), and Europe/Africa (to include Djibouti, future AFRICOM support, and the relatively small amount of support work being performed in Georgia and Bosnia). The remaining program office members (i.e., Property Administrators, Technical Support, and Administrative Support personnel) would be used to provide technical insights and management support to the joint program. Using geographically administered TOs allows for maximum standardization of TOs since every region will require many of the same support capabilities (e.g., food services, laundry services, water purification services, fuel services, O&M services, etc.). Standardization leads to easier, more streamlined TO administration, which, in turn, leads to the need for fewer administrators.

Furthermore, it is easier to roll the requirements currently supported by the GCCC, the GCSC, and the AFCAP into the LOGCAP geographic format since the former are much smaller in scope (compared to the scope of the LOGCAP TOs) and are already located in the LOGCAP support areas. Implementing a JCAP would essentially

involve rolling the current GCCC, GCSC, and AFCAP requirements into the respective LOGCAP TOs in the geographic areas that are currently in use (by the LOGCAP).

Consideration is given to the fact that CAPs are exhausting programs to be involved with due to the contingency nature and importance of each requirement. Personnel involved with CAPs are essentially “available” 24 hours a day, 7 days a week. This operational tempo takes a toll on all parties involved; therefore, ensuring depth of personnel in each position is essential to the health of both the employees and the program.

By combining the CAPs into one JCAP, it is possible to eliminate 19 duplicative FTEs. The average salary of program employees was determined by averaging the grade for all employees listed in Table 15. The average employee on the CAPs is a GS-12. Given an average base salary of \$76,627 per year (not including fringe benefits), that’s a \$1.45M savings per year, or \$14.5M over the life of one ten year JCAP.

A more accurate way to estimate the number of personnel needed to properly administer (i.e., from requirements gathering, to TO award, through TO administration, and finally to TO closeout) a JCAP is to examine the historical data for all CAP TOs in a region to determine the number of manhours of PEO and CAO administration that each JCAP TO requires. As each individual CAP TO expires and is “folded into” the JCAP, the losing (i.e., service-specific CAP) PEO would work with the gaining (i.e., the JCAP) PEO, to examine the total requirements for the region, and use historical data (i.e., the capabilities provided by each TO, the number of TO modifications performed, the number of troops supported, etc.), to estimate the number of manhours that the new JCAP TO will require. Those manhours would then be used to staff both the PEO and the CAO.

Naturally, for this method to work, a JCAP PEO would have to be established and in the early stages of operation *concurrent to* the operation of the four existing service-specific PEOs. In other words, there will essentially be five CAP PEOs (i.e., LOGCAP, GCCC, GCSC, AFCAP, and JCAP) for a period of time. Those five PEOs will slowly be whittled down to one (i.e., the JCAP PEO) as each service-specific TO expires and is

folded into the JCAP regional TO. Once a PEO's TOs have all been folded into the JCAP, the PEO can officially disband. The expectation is that some of the personnel currently operating the service-specific CAPs will transfer to the new JCAP PEO. This method is preferred because it allows the JCAP PEO to retain the large amount of invaluable "corporate knowledge" and experience that current CAP personnel possess. Therefore, a case would have to be made to support the stand-up and staffing of a new JCAP PEO. The case should include the expectation that adjustments will be made as the program expands and contracts to meet future contingency needs.

For example, if a new JCAP TO was going to replace the one LOGCAP and four AFCAP TOs in Northern Iraq, the JCAP PM and PCO would work with the LOGCAP and AFCAP PMs and PCOs to establish a timeline for rolling the existing requirements into a JCAP TO. Ideally, the roll-up would coincide as closely as possible to the expiration dates of the LOGCAP and AFCAP TOs. Requirements will likely have to be phased-in as TOs expire (i.e., the new JCAP TO could be written to include the total sum of requirements, and requirements can be "turned on" as the existing LOGCAP and AFCAP TOs expire). Once the timeline is established, the PMs and PCOs work together to gather recent and relevant historical data about the requirements (i.e., how many new requirements were added, and how long the requirements process takes, how many modifications occurred and how long it took to process each modification, the number of work orders processed and how long it takes to process and administer each request, how many quality audits were performed and how long each audit took to perform, etc.), and use that data to estimate the number of manhours required to administer a JCAP TO for Northern Iraq. Once the manhours are established, the JCAP office can staff the TO administration appropriately and make staffing recommendations to the CAO.

The offices performing this assessment must be sure to rely on more than just historical data. They must also use common sense to determine which LOGCAP and AFCAP TO requirements represent duplicative efforts between the two programs and eliminate the duplication. They should take into account anticipated future requirements—customer input is essential to this process. Finally, they must realize that the process of matching requirements to staffing should occur continuously throughout

the life of the JCAP. Contingencies programs are constantly expanding and contracting to meet the needs of the warfighter, and staffing should expand and contract concurrently. This process is not perfectly accurate; however it will provide a more thorough assessment of the required staffing of a JCAP PEO and CAO.

Perhaps more important than potential cost savings are the efficiencies that could be gained by having one program office for one JCAP. The program office would serve as the hub for all JCAP training, requirements, questions, and issues. Once the process was established, program office personnel could work with deploying CAO personnel and deploying unit commanders to ensure they understand how to properly administer JCAP contracts overseas. New requirements and questions could be vetted easier because the CAO and customers would have one program office to work with for all requirements. The learning curve would be steep, especially for first-time JCAP administrators deploying to a contingency environment; but once a person works with and understands the program in that environment, they will not have to start the learning process over for their next deployment. After familiarization, having a single JCAP will reduce the steepness of the learning curve and will likely lead to better, more thorough administration of the program and its contracts.

### **3. OCONUS Contract Administration and Oversight**

OCONUS contract administration and oversight encompasses all the activities of the CAO, including TO administration and compliance, quality inspections, property administration, new requirements planning, material requisition approvals, compiling and presenting award fee information (where applicable), and serving as the link between the contractor and the customer. CAO personnel, including CAO Commanders, ACOs, QARs and PAs, frequently rotate in and out of their positions in theater. The average tour length is six months; however, some positions (mainly Commanders) average a tour length of one year.

The Gansler report noted that CAOs are undermanned, given the requirements of their programs. Informants routinely expressed they lacked the time necessary to meet all customer and oversight requirements. All agreed that they focused on the major requirements and attended to minor requirements if time allowed. Additionally, many CAO personnel were responsible for Forward Operating Bases (FOBs) outside the one where they were physically located. These FOBs received the least amount of personal attention simply due to the physical separation and associated travel difficulties. Figures 1, 2, and 3 present geographic displays of the distribution of LOGCAP and AFCAP personnel in Afghanistan and Iraq. Similar images were not available for the GCCC and GCSC. Table 17 presents the number of CAO personnel, contractors, and supported personnel (including military, contractors, and DoD civilians) and the number of FOBs in Afghanistan and Iraq supported by program. No data is available for GCCC and GCSC because they do not operate in Afghanistan or Iraq.

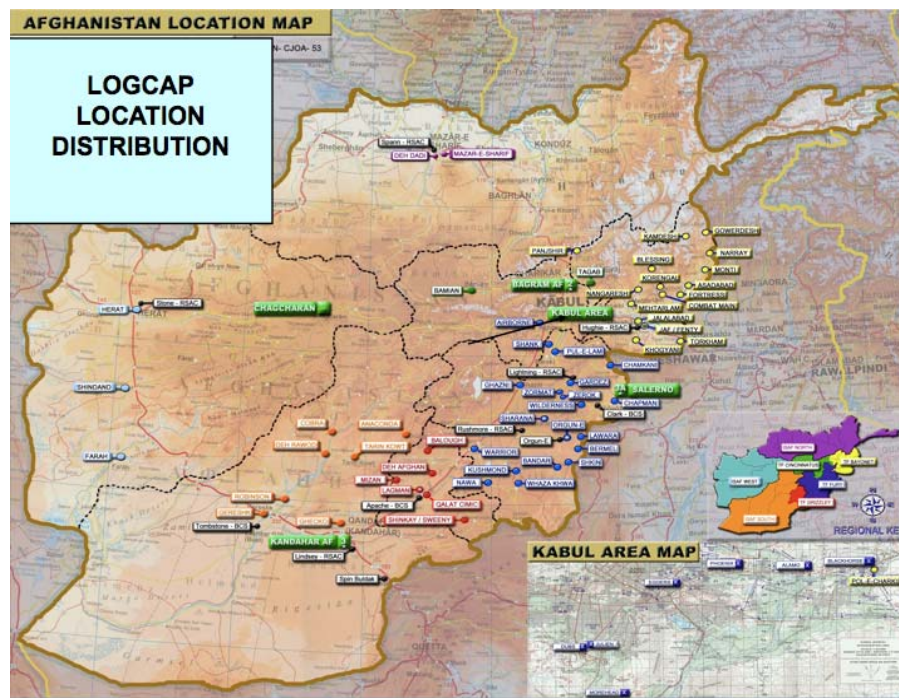


Figure 1. DISTRIBUTION OF LOGCAP SITES IN AFGHANISTAN (From Defense Contract Management Agency (DCMA), 2008)

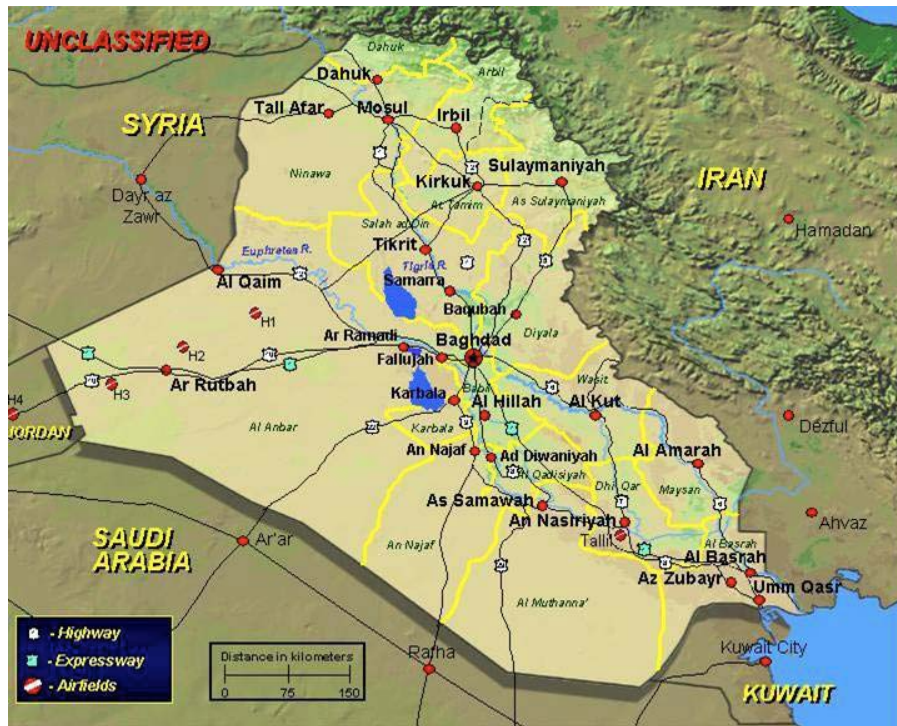


Figure 2. DISTRIBUTION OF LOGCAP SITES IN IRAQ (From Defense Contract Management Agency (DCMA), 2008)

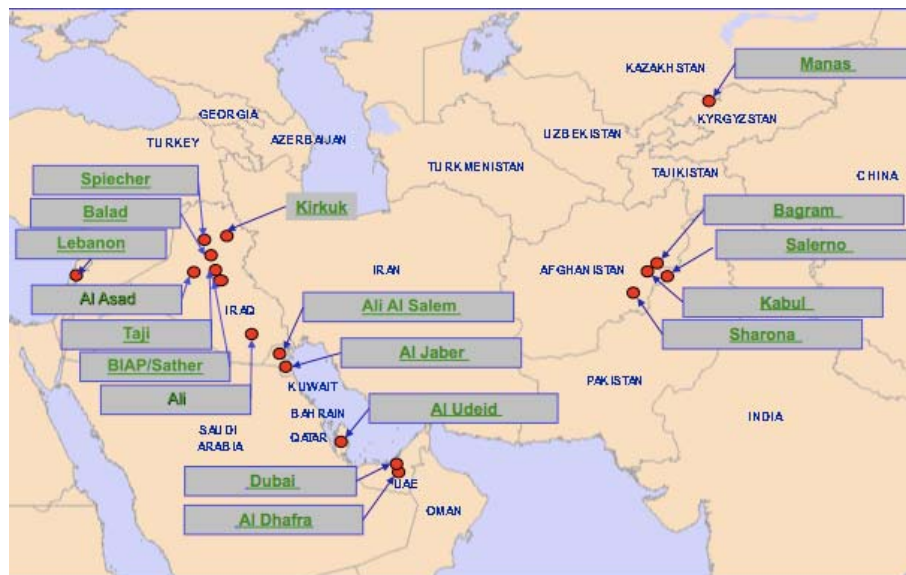


Figure 3. DISTRIBUTION OF AFCAP SITES IN SWA (From Air Force Contract Augmentation Program (AFCAP), 2008)



CAO Support Statistics for Afghanistan and Iraq						
Program	# CAO Personnel (Iraq and Afghanistan)	# CAP Contractors (Iraq and Afghanistan)	Total # Supported (Iraq and Afghanistan)	# FOBs Supported (Iraq and Afghanistan)	CAO/ Contractor Ratio	CAO/ Supported Personnel Ratio
LOGCAP	198	54,433	350,000	122	1/275	1/1,768
AFCAP	71	1,767	100,000	16	1/25	1/1,409

Table 17. CAO Support Statistics for Afghanistan and Iraq

The large difference between the LOGCAP and the AFCAP in CAO/Contractor Ratio column is a result of the difference in reporting and the difference in the capabilities provided by the programs. For instance, the LOGCAP's total for CAO Personnel includes only DCMA personnel. It does not include approximately 1,000 CORs/COTRs assigned to individual FOBs across both theaters. Conversely, the AFCAP's total includes their QAE/COR/COTR personnel. Furthermore, the type and magnitude of capabilities provided by the LOGCAP (BLS, TTM, CLSS) requires a large, permanent population of contractors. The AFCAP, on the other hand, often writes TOs for smaller, more specialized requirements that call for less, more temporary contractors. Including the CORs/COTRs to the LOGCAP numerator provides a better comparison of ratios for the CAO/Contractor Ratio, as shown in Table 18.

Normative CAO Support Statistics for Afghanistan and Iraq						
Program	# CAO Personnel (Iraq and Afghanistan)	# CAP Contractors (Iraq and Afghanistan)	Total # Supported (Iraq and Afghanistan)	# FOBs Supported (Iraq and Afghanistan)	CAO/ Contractor Ratio	CAO/ Supported Personnel Ratio
LOGCAP	1,198	54,433	350,000	122	1/46	1/293
AFCAP	71	1,767	100,000	16	1/25	1/1,409

Table 18. Normative CAO Support Statistics for Afghanistan and Iraq

A JCAP would likely take on the attributes associated with the LOGCAP: a large, permanent population of contractors to provide day-to-day support capabilities. The nature of the capabilities necessary to keep a FOB operational simply demands a large

contractor population. However, proper program training prior to deployment for both CAO and unit personnel (as previously mentioned) could increase the efficiency and quality of the program's administration.

The number of CAO personnel available to deploy is limited. Currently, the DCMA serves as the CAO for the LOGCAP and the AFCAP, the two largest programs, and most military personnel in the DCMA do multiple tours while with the agency. The DCMA recruits its civilians to augment the military in OCONUS oversight; but there is still a shortage of personnel available for deployment. Augmentation by the individual services (i.e., personnel who do not belong to the DCMA) is possible and has been used in the past; however, given that the DoD has a "shortage of qualified oversight and contract administration personnel" (GAO, 2008, p. 8), it is difficult to get the services to agree to provide contracting assets to administer and oversee the CAPs. The Navy uses both military and civilian personnel to manage their GCCC and GCSC. Military personnel are Active Duty Navy members who belong to NAVFAC or the Navy in general. Because of the small size and few locations of their TOs, the Navy does not generally have trouble filling their CAO positions.

Seven cases of personnel duplication exist in the administration of the LOGCAP and the AFCAP overseas. Duplication is defined as having both LOGCAP and AFCAP administration duties at the same site with different administrators. DCMA has allocated one position to serve as the administration and oversight for all the AFCAP locations in Afghanistan and Iraq. This is possible because the TOs issued under the AFCAP are very specific and can be monitored effectively by Air Force QAEs/CORs on the site. The designated ACO travels regularly to all the various AFCAP sites to oversee operations and get feedback from the QAEs/CORs. The feedback is consolidated every month and sent back to the PEO for contractor evaluation purposes. As mentioned, at seven of these locations, DCMA personnel already exist to administer the LOGCAP. Whether or not the LOGCAP administrator can handle the extra duty of also administering AFCAP TOs depends on the requirements of each program at that site. Based on information received from informants, in six of the seven places, both LOGCAP and AFCAP duties could be handled by one administrator. Since the Navy operates its contracts at only non-hostile



locations outside the areas where either the LOGCAP or the AFCAP primarily operate, there is no duplication between the LOGCAP and the GCCC/GCSC or between the AFCAP and the GCCC/GCSC.

There is a significant amount of overlap in the basic office functions performed between all four CAPs. All programs require PMs, PCOs, ACOs, QARs, PAs, and other technical representatives, and each of them is focused on the rules, regulations and policies of their individual program. Thus, if a person is required to deploy to different programs, he/she must take the time and shoulder the burden of learning the specificities of each program.

Two examples might highlight the differences associated with each of the programs. First, as previously detailed, LOGCAP requirements are handled on-site, are heavy with contractor input, and must be vetted through the JARB and other approval boards (e.g., the LOGCAP Working Group (LWG)) before being added to the existing TO by the ACO in theater. New requirements are not competed because TOs are regionally designated, not task designated. AFCAP requirements, on the other hand, are handled mainly at the PEO, have minimal contractor input, and may proceed without JARB approval (depending on whether or not the requirement is vetted properly by the user/customer). Once vetted through the PEO, the program office competes the requirement, and issues a new TO and the notice to proceed. Each process is unique and requires the personnel involved to understand the process and know the right people to ensure the process flows smoothly.

A second example highlights the differences in performance feedback. For the LOGCAP, metrics are established for each service on the regional TO. Monthly Performance Evaluation Boards (PEBs) are performed in a manner similar to an actual Award Fee Evaluation Board (AFEB) to provide feedback to the contractor. While the PEBs do not technically determine award fee earned, they do contribute to the semi-annual AFEB input. The feedback process involved with such large cost-type TOs is rigid and requires in-depth knowledge of the SOW and accurate assessment of the contractor's performance. AFCAP, on the other hand, issues many more FFP-type TOs that require much less burdensome (i.e., requires less formal procedures than a CPAF

Award Fee Board) contractor evaluation and feedback. Feedback is provided, of course, but the rating scales and metrics are very different from those of the LOGCAP. Again, all personnel involved in the feedback for either program must be very familiar with their SOW and the contractor's performance. This can be quite a daunting task in a contingency environment where the pace of operations is rapid and change is constant, to say nothing of the complexity of the TOs or the sheer page-length of the SOWs.

Potential efficiencies exist in the training of personnel by combining all the CAPs into a single JCAP. Given the current operations tempo, the average contracting officer can expect to deploy for at least two six-month deployments in a three-year assignment. This is true for all DCMA and AF deployers (Anonymous, 2009; Schwartz, 2009). Army contracting officers generally perform at least one 12-month deployment during each three-year assignment; however, some experience two 12-month deployments because of the high operations tempo. Although the Army and AF are attempting to bolster their contracting force numbers, it takes several years to adequately educate and train personnel in this career field. Therefore, the operations tempo for contracting officers is expected to remain high for the foreseeable future.

Multiple deployments would serve to make administrative and oversight personnel more adept and familiar with the joint program, flattening the learning curve and decreasing the amount of time it takes to acclimate to the program and to the stress associated with the number of "unknowns" that exist in administering a multi-million dollar TO in a contingency environment. Efficiency is needed in this environment to counter the issues addressed by the Gansler Report and various recent GAO reports (United States Government Accountability Office, 1997; United States Government Accountability Office, 2008; United States Government Accountability Office, 2004; United States Government Accountability Office, 2008) regarding contingency contracting, such as the need for consistent, standardized, planned use of CAPs; strengthened oversight and administration; and better inter-agency coordination.

Furthermore, by becoming a joint program, JCAP would be able to pool the contract administration personnel of all four services (Marine Corps included) to support the program in contingency environments. Efficiencies could be gained by having a

larger pool of people. For instance, contingency positions could be filled according to a person's skill level, with smaller, less problematic FOBs receiving newer, less experienced or less knowledgeable contract administrators; while large, problematic FOB positions could be filled with more experienced, more knowledgeable contract administrators. This would ensure a more efficient use of DoD's limited contract administration personnel.

#### **4. Organizational Culture**

Naturally, each service would prefer to retain individual CAPs, because they allow each of them to exercise complete command and control over "their" contractors and the functions they perform for "their" service. Furthermore, the PEOs are part of "their" service's organizational chart, meaning that the people who work in those offices have a proclivity for pleasing "their" service—"their" customers. If the programs were to combine into a JCAP, determining whose procurement and administration "models" to follow would be a very difficult endeavor since each service is accustomed to their own way of doing things.

Furthermore, standards of individual functions to be performed, regulations, policies, and instructions would have to be agreed upon by each service. Finally, the most difficult part of combining CAPs would likely be addressing personnel requirements. The number of PEO personnel required to operate and maintain continuity of one program is smaller than the combined total of all four CAP PEOs. This implicates that some experienced PEO personnel might have to move to a new location (wherever the new JCAP PEO is established) if they choose to remain involved with the CAP, and other PEO personnel might find themselves removed from the CAP staff altogether. For OCONUS contract administration and oversight, each service must be willing to throw its available contracting personnel into the pool of potential administrators. These are cultural issues that would require a significant amount of thought and compromise to satisfy each service.

## **5. JCAP Efficiencies**

How is CONUS program administration and OCONUS contract administration and oversight affected by a JCAP? CONUS program administration for a JCAP would consist of one joint PEO vice the four PEOs that currently exist. There would also be fewer basic ID/IQ contracts to negotiate, award, manage, and close out. Currently there are 13 basic contracts (three LOGCAP, three GCCC, one GCSC, and six AFCAP). A JCAP would require significantly fewer basic contracts. The total number would depend on how many contractors the JCAP PEO is willing to award contracts to; however, the total is likely to be between three and six contractors. The result is a decrease of five to eight basic ID/IQs to negotiate, award, manage, and close out. Consolidating the effort would mean that 19 fewer positions are necessary, resulting in a savings of \$1.45M per year. Those in the program office would necessarily be highly capable and experienced. They would be responsible for the continuity of the program, and for training the continuous stream of CAO personnel and units that will use their program.

OCONUS program administration for a JCAP would require all CAO personnel to fall underneath one expeditionary unit. The unit commander would assign available personnel to positions commensurate to their abilities. Each service would provide properly trained administration personnel, reducing the strain on heavily-utilized Air Force and Army personnel. CAO personnel would initially experience a steep learning curve (like they would experience the first time they join any large program); however, that curve would become flatter each time they were deployed in conjunction with the program.

## **F. CEA: EASE OF USE**

Ease of use is an important element for all CAPs, to both administrators and users/customers. Military operations require flexible, accommodating logistical tails. This section will analyze two areas of ease of use: (1) the ability to understand each CAP and its uses and (2) cross-service utilization of CAPs. It will define the research question and how the CEA will be performed.

## **1. Research Question**

The research questions, “How is ease of use affected by using a JCAP vice individual programs?” and “Will one program serve the needs of the combatant commanders better or worse than individual service-specific programs?” seek to determine if any efficiencies in customer education and program administration could be gained by standardizing the individual CAPs into a single JCAP. The goal is to determine how difficult or easy it is to understand each CAP (i.e., the capabilities provided, how new requirements are added, etc.) and whether or not it would be administratively (CONUS and OCONUS administration and oversight) easier and promote better understanding amongst CAP users to have one JCAP. To perform the CEA, the learning curve theory was used to examine potential time savings that may occur by consolidating the CAPs into one program. Furthermore, this study examined how easy or difficult cross-service CAP utilization is and whether consolidating would better serve the needs of the combatant commanders.

## **2. Ability to Understand the Program and its Uses**

For any first-time user of a CAP, the learning curve is steep. Each program is complex and has unique methods for requesting support, adding new requirements, and evaluating the contractor. T.P. Wright first introduced the concept of learning curve to the aircraft industry in 1936. Wright theorized that learning curves occurs “primarily because the time required to perform a repetitive task will decrease each time the task is repeated” (Defense Acquisition University, 2006). Generally, the repetition of the same tasks or operations results in less time or effort expended on that operation. Item complexity and workforce stability are aspects that can hinder learning curves, and thus, effectiveness in the long run. As mentioned, CAPs are complex and contain a mix of stable workforce positions and unstable workforce positions (generally stable at the PEO and unstable at the CAO); therefore, the learning curve is steep and only flattens as one gains more experience with each program. As the administrative workforce makes gains along the curve, less energy and time are required to understand and execute the program.

Currently, because the four CAPs are individual programs, the learning curve is unique for each new program the administrator joins.

McMillon (2000) found that the training time allotted for a new administrative deployer to learn the details of a program can range from twelve to eighteen days, and that the training regiments differ per service. Furthermore, the amount of personal training and education an administrator has plays a role in how well they will perform once in theater. If the individual has an extensive background in their field (i.e., contracting, quality, property management, etc.), it will likely be easier for that individual to understand the program's nuances and be able to communicate them to the customer. However, if an individual has little background experience, he or she will face an extremely steep learning curve, which may hinder the mission or operations of the FOB he or she is assigned to until the proper amount of knowledge is developed.

In regards to the ability to understand the program, the benefit of combining all four CAPs into one JCAP lies in standardization. One program means there is only one set of policies, regulations, and manners in which the CAP is executed. This flattens the administrator's learning curve. In terms of contract monitoring, a joint program enhances a contracting officer's and contracting officer representative's ability to monitor the contractor's performance because the SOW would not vary as widely across TOs. One SOW is far easier to monitor and evaluate than multiple SOWs under multiple programs.

One program means there is only one way to request new support functions—add new capabilities, and evaluate the contractor. This decreases the customer's learning curve. Finally, one program means that administrators and customers can attend one set of training in order to have a similar understanding of the program when they deploy. Possessing a good foundation of program knowledge prior to deploying is essential when supporting contingency operations where time is of the essence. This type of standardization would serve to manage the expectations of the customers, and it would also ease the burden on heavily-laden administrators, perhaps reducing the amount of administrative errors.

### **3. Cross-Service Utilization of CAPs**

For an administrator or customer, understanding your own service's CAP is difficult enough; however, in some contingency situations, administrators and customers must learn another service's CAP because they are the prevailing service-provider at their FOB. This section examines the level of difficulty cross-service utilization of CAPs presents. Responses from informants suggest there is little incentive to learn or understand another service's CAP until you are forced into a situation where your service's CAP is unavailable or is not the predominant service-provider. When this happens, the administrator and customer must learn the intricacies of another program. One Army officer noted, "In the deployment time crunch, I was more concerned with getting up to speed on [the] LOGCAP. I figured if I learned [the] LOGCAP, [the] AFCAP would be similar. [That turned out to be] true for the support services, but not in how to request services and who to contact." Another Army officer said, "I didn't know [the] AFCAP even existed until I was put in charge of administering it."<sup>8</sup> Furthermore, the majority of informants did not know that the Navy had logistics support programs similar to the LOGCAP and the AFCAP. Naturally, informants expected other programs to function similar to their own. Frustration quickly arose when they learned how different the programs were and how their "urgent" requirement was going to take more time than anticipated.

Basic differences mentioned by the informants involved: getting a new requirement approved (i.e., the steps for submitting a new requirement, the level(s) of approval necessary, and the level of customer involvement in creating the SOW); the scope of capabilities available (i.e., how broad or specific a TO could be, and the type of capabilities available or unavailable to the customer); and monitoring and evaluating contractor performance (i.e., the level of customer involvement and commitment in the feedback process, the expectation of the customer to provide CORs, and whether the customer gets a voice in the feedback process at all). Table 19 demonstrates the differences between the four programs.

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<sup>8</sup> NOTE: Informant was referring to his first Operation IRAQI FREEDOM deployment in 2005.

Program Process Differences			
Topic	LOGCAP	GCCC/GCSC	AFCAP
New Requirement Approval	<p>Requirement submitted to JARB and LWG</p> <p>Approval provided by CJ4, CJ7, CJ8, CAO Commander</p> <p>Customer plays small role in SOW creation (performed mostly by the LSO)</p>	<p>Requirement submitted to ACO and PCO</p> <p>Approval provided by PCO</p> <p>Customer plays a large role in SOW creation</p>	<p>Requirement submitted to ACO and PCO</p> <p>Approval provided by PCO</p> <p>Customer plays a large role in SOW creation</p>
Scope of Capabilities Available	TOs are broad in nature and most new requirements are considered in scope	TOs are somewhat broad in nature and some new requirements are considered in scope	TOs are narrow in nature and some new requirements are considered in scope while others require a new TO
Monitoring and Evaluating Contractor Performance	<p>Customers provide feedback to high-level commanders or to the ACO</p> <p>Customer expected to provide CORs for major service support areas (i.e., water production, food operations, etc.)</p> <p>Customer feedback is highly valued and used to provide contractor feedback and evaluation</p>	<p>Customers provide feedback to high-level commanders or to the ACO or CORs</p> <p>Customers must provide CORs for all TOs</p> <p>Customer feedback is highly valued and used to provide contractor feedback and evaluation</p>	<p>Customers provide feedback to high-level commanders or to the ACO or QAEs</p> <p>Customers must provide QAEs for all TOs</p> <p>Customer feedback is highly valued and used to provide contractor feedback and evaluation</p>

Table 19. Program Process Differences

The standardization that would occur by using one JCAP would, again, serve to manage customer expectations and decrease the learning curve of a new administrator or customer. Efficiencies would be gained in planning (i.e., understanding the approval system and anticipating the amount of planning necessary to use a JCAP), time (i.e., the amount of time required to add a new requirement from paper to execution), and contractor monitoring and evaluation (i.e., holding the contractor to one, unified standard



and providing timely and accurate feedback). Improvements in CAP efficiency while maintaining or improving effectiveness will undoubtedly lead to increased customer satisfaction.

#### **4. Organizational Culture**

Consolidation of the existing CAPs will lessen the cultural differences among the services in the areas of policy, regulations, processes and expectations because all of the services will be performing within one set of guidance. Combining into a single JCAP requires the services to agree on one set of policies, regulations, and processes. This may be more difficult than expected. For instance, the Army prefers to write large, broad, regional TOs and add new requirements incrementally. The Navy and Air Force prefer to write specific, task-oriented TOs with few anticipated changes. Which style would the services agree upon for a JCAP? Furthermore, the Army prefers to gain several levels of approval before adding new requirements to a TO, whereas the Air Force approval structure is relatively flat. Which style would the services agree upon for a JCAP? These cultural differences will need to be addressed with the mindset that ease of use is a common goal.

#### **5. JCAP Efficiencies**

How is ease of use affected by using a JCAP vice individual programs? Will one program serve the needs of the combatant commanders better or worse than individual service-specific programs? Ease of use will be improved under a JCAP because of standardization. Instituting one program will allow administrators and customers to follow one set of guidelines and procedures. By doing so, all entities will be able to understand the support capabilities available, the process for adding new requirements, the levels of approval that are necessary, the timeline associated with their particular requirement, and what their role will be in the administration and evaluation of their requirement. Standardization helps in the strategic and operational planning processes because commanders know what they can expect from their supporting contractors and how to include those expectations (and the contractors themselves) into campaign plans.

Because this standard will remain the same from FOB to FOB, from theater to theater, and from CONUS to OCONUS, combatant commanders and their subordinate commands will find the program easier to understand with each use. Best practices can be easily transferred to all locations where the program is used, thus increasing the efficiency and effectiveness of the JCAP while maintaining or improving performance standards. Finally, administration will improve as administrators become more familiar with the JCAP, ensuring tax dollars are spent as efficiently as possible.

#### **G. SUMMARY OF COST EFFECTIVENESS ANALYSIS**

This chapter addressed the cost effectiveness of each of the five research areas. For planning, the study shows that by performing acquisition planning and source selection for one JCAP vice four individual programs, there is potential to save 173,700 manhours, or the equivalent of \$5.5M per program iteration. By having one JCAP, commanders are better able to plan for and use the program during major conflicts or humanitarian assistance operations. Standardization of processes would help new requirements make it to contract faster, as all the people involved would understand the process and approval system.

With a JCAP, the breadth of capabilities available would encompass all of the functions that exist in the current programs. Duplication of effort would diminish, while gaps that currently exist in the individual programs would be fulfilled by the all-encompassing JCAP. In this manner, all military services have the full range of support functions available to them. In the area of financial processes, one JCAP would serve to streamline the funding process while capitalizing on (or creating new) financial expertise that currently exists in the programs. It would also serve to provide an accurate baseline of costs that all services could use to create their support function budgets. In the area of command and control, one JCAP would reduce the number of PEO personnel needed, as four program offices could be combined into one. This would diminish the amount of personnel duplication that exists between the four program offices by 19 FTEs, resulting in a savings of \$1.45M per year and providing better unity of command. Additionally, all services could provide personnel to administer the JCAP, thereby increasing the number

of people available and allowing CAO commanders to fit an individual administrator's experience to jobs and locations commensurate with their abilities. Finally, perhaps most important to the customers of large logistics support programs, ease of use would improve under a JCAP because the best practices of each of the programs could be used to develop standards and processes of the JCAP. Standardization of processes would make the program easier to understand for all parties, easier to use for customers, and easier to administer for PEO and CAO personnel. Table 20 provides a summary of the Cost Effectiveness Analysis.

Summary of Cost Effectiveness Analysis (CEA)			
	<u>Individual CAPs</u>	<u>JCAP</u>	<u>Potential Efficiency</u>
<b>1. Planning</b>	Acquisition Planning and Source Selection Process is required four times per contract iteration	Acquisition Planning and Source Selection Process would only be required once per contract iteration	Fewer time-consuming Acquisition Planning and Source Selection Processes (potentially as few as one/decade when using a basic plus 9 option years contract)
	Manhours required for Acquisition Planning and Source Selection for four separate programs: 326,220 Hours	Manhours required for Acquisition Planning and Source Selection for one program: 152,520 Hours	173,700 hours or \$5.5M saved per contract iteration
	Planning for New Requirements is done individually with each program office	Planning for New Requirements is done collectively at the sole joint program office (would require service agreement on how and where new requirements will be handled)	Joint determination and handling of new requirements
<b>2. Capabilities Provided</b>	7 of 18 capabilities are considered "gaps" in one of the programs	0 capability gaps	All capabilities available to all services
	Each of the critical capabilities are provided (or are "overlaps") by at least two programs	0 capability overlaps (because there's only one, joint program)	Reduced duplication of capabilities
	Performance standards for quality and timeliness vary among all programs	Performance standards for quality and timeliness are standardized	Allows for more thorough and efficient administration, oversight, and performance measurement

Summary of Cost Effectiveness Analysis (CEA)			
<b>3. Financial Processes</b>	Total MIPRs/Year: 252	Total estimated MIPRs/Year: 36	Reduction of 216 MIPRs per year
	Labor Rates must be negotiated and checked for cost realism separately on each program	Labor Rates could be negotiated and checked for cost realism one time	One set of rates assists administrators during proposal reviews
<b>4. Command and Control</b>	Four separate PEOs with a total of 37 personnel	One PEO with a total of 18 personnel	19 fewer personnel necessary, or the equivalent of \$1.45M savings per year
	OCONUS program administration falls under four separate program offices, training varies among the programs, learning curve is steep when switching programs	OCONUS program administration falls under one program office/one expeditionary unit, training could be standardized, learning curve flattens with each administration assignment, personnel could be matched to positions based on individual skills and capabilities	Potentially more thorough administration, flattened learning curve, bigger pool of candidates from which to draw administrators, one face to the supported Commander
<b>5. Ease of Use</b>	Disparate guidelines and procedures/processes for each program	One set of standardized guidelines and procedures/processes for the joint program	Standardization helps the strategic and operational planning process by showing Commanders what they can expect from their supporting contract/contractors, increases potential for proper administration and oversight
	No mechanism for implementing the best practices among the four programs	Best practices from each of the four programs would be implemented in the creation of a JCAP	Increased effectiveness and efficiency

Table 20. Summary of Cost-Effectiveness Analysis (CEA)

The next chapter will provide conclusions about the cost-effectiveness analysis (CEA) performed in this chapter and recommend whether or not a JCAP is feasible and appropriate for military logistics support. It will examine the best practices that emerged

in the course of the study. Finally, it will provide courses of action available and make recommendations for the future of military logistics support programs and for future studies related to this topic.

## **V. FINDINGS, BEST PRACTICES, COURSES OF ACTION, RECOMMENDATIONS, AND AREAS FOR FURTHER RESEARCH**

### **A. INTRODUCTION**

This section will use the information presented and analyzed in Chapter IV to generate a list of findings from the Cost-Effectiveness Analyses (CEA) and a list of best practices from all of the programs. Further, three courses of action—Do Nothing, Create an Executive Lead Board, and Create a JCAP—will be presented for high-level decision-making review. Finally, the researchers will provide recommendations and list areas for further research.

### **B. FINDINGS**

As discussed in the last chapter, there are potential efficiencies in each category represented in the Cost-Effectiveness Analyses (CEA). These findings serve as the platform for constructing and presenting the best practices of each CAP and the three potential courses of action regarding a JCAP. As a refresher, the potential efficiencies associated with implementing one joint program are described below and summarized in Table 21.

In the area of Planning, a JCAP could potentially reduce the number of time-consuming Acquisition Planning and Source Selection processes needed to let a new contract to as few as one per decade (when using a one basic plus nine option years contract). This reduction could save 173,700 manhours, or approximately \$5.5M per contract iteration. Furthermore, a joint program would allow for coordinated, joint determination of requirements, thus ensuring all services' needs are met in one program/one contract.

In the area of Capabilities Provided, a JCAP allows all services to access the full range of capabilities available. It also eliminates duplicative capabilities that currently exist between the four individual CAPs. Additionally, standardization of the capabilities allows for more thorough, more efficient administration, oversight, and performance measurement.

In the area of Financial Processes, a joint program could potentially reduce the number of MIPRs needed per year by 216—from 252 to 36 per year. More importantly, a JCAP would have one set of Labor Rates for use during proposal reviews. One set of Labor Rates reduces the administrative burden on Contracting Officers and also decreases the potential for administrative mistakes.

In the area of Command and Control, a JCAP could potentially reduce the number of PEO personnel needed to administer the program by combining the four individual PEOs into one, joint PEO. The basic geographic- or regional-based approach used in this study suggests the potential savings will be 19 fewer FTEs, or a savings of \$1.45M per year, or \$14.5M over the life of one ten-year contract. As mentioned, a more thorough workload assessment is needed to determine adequate staffing levels and accurate potential savings (i.e., savings based on actual workload numbers vice the geographic- or regional-based assessment used in this study). A JCAP could also potentially lead to more thorough administration due to the standardization of practices and a flattened learning curve (as administrators become more familiar with the program and/or repeatedly administer the program). With the ability to draw administrators from all services (vice single-service administrative support), CAO Commanders have a larger pool of candidates from which to select and assign administrators. This allows CAO commanders to match administrators to FOBs and duties commensurate with their abilities and experience level. Perhaps most important to the Users/Customers, a joint program would serve as “one face” to the supported Commander. He/she will no longer have to interact with two or three different CAPs within their AO—instead they will interact with one JCAP. “One face” is critical to providing timely, uncomplicated support capabilities in contingency environments.

Finally, in the area of Ease of Use, the standardization of program capabilities assists the strategic and operational planning process because one JCAP would help supported Commanders know what they can expect from their supporting contract/contractors. As Commanders use the program, they will understand the processes associated with the program and the lead times required to start new services and acquire support. Having accurate lead times and knowing what to expect allows the

supported Commanders to make better strategic and operational planning decisions. Additionally, a JCAP could combine the best practices and lessons learned from the current CAPs to create a better joint program.

<b>Cost Effectiveness Analysis (CEA) Findings</b>	
	<u>Potential JCAP Efficiency</u>
<b>1. Planning</b>	Fewer time-consuming Acquisition Planning and Source Selection Processes (potentially as few as one/decade when using one basic plus 9 option years contract)
	173,700 manhours or \$5.5M saved per contract iteration by combining requirements into one, joint Acquisition Planning and Source Selection Process
	Joint determination and letting of requirements
<b>2. Capabilities Provided</b>	All capabilities available to all services
	Zero duplication of capabilities
	Standardization allows for more thorough and efficient administration, oversight, and performance measurement
<b>3. Financial Processes</b>	Reduction of 216 MIPRs per year
	One set of Labor Rates used during proposal reviews (reduces administrative burden and potential for administrative mistakes)
<b>4. Command and Control</b>	19 fewer PEO personnel needed by combining four PEOs into one, or the equivalent of \$1.45M savings per year, \$14.5M over the life of one ten-year contract
	Potentially more thorough administration due to standardization, flattened learning curve, bigger pool of candidates from which to draw administrators (selecting administrators from all services, vice single-service administrative support), one face to the supported Commander
<b>5. Ease of Use</b>	Standardization helps the strategic and operational planning process because Commanders know what they can expect from their supporting contract/contractors
	Increased effectiveness and efficiency through the combined implementation of best practices

Table 21. Cost-Effectiveness Analyses (CEA) Findings

## C. BEST PRACTICES

In the course of this study, several practices from each of the programs stood out as “best practices.” Many of the informants who are familiar with more than one program pointed out the best practices of each program—and followed with the trailing question, “I don’t know why our program doesn’t do it like that...?” The “best practices” listed below are the result of consolidating the expert opinions of several informants. Only areas mentioned by two or more informants as “best” are presented in Table 22.



Program Best Practices		
<u>Program</u>	<u>Practice</u>	<u>Why It's a Best Practice</u>
LOGCAP AFCAP	Multiple Award Contracts	<ul style="list-style-type: none"> <li>• Encourages competition</li> <li>• Competition often lowers price while preserving quality</li> <li>• Develops base of contractors who are able to support the mission</li> <li>• Contractors who demonstrate poor performance do not receive new TO awards—motivates quality performance</li> </ul> <p>LIMITATION: Must be able to produce enough work to attract and maintain multiple contractors.</p>
LOGCAP	Customer Training Process	<ul style="list-style-type: none"> <li>• Ensures supported customer understands the program and the specificities of the TOs in their AO prior to deployment</li> </ul>
AFCAP GCCC / GCSC	Requirements Definition Process	<ul style="list-style-type: none"> <li>• Performed as an inherently Governmental function without excessive contractor participation</li> <li>• Ensures minimal conflict of interest / avoids situation where the contractor writes their own requirements</li> </ul> <p>LIMITATION: Must have the workforce and the technical “know-how” to develop a SOW with proper performance parameters. Admittedly, it can be a slower process; however requirements definition is an inherently Governmental function.</p>
LOGCAP	Performance Evaluation Process	<ul style="list-style-type: none"> <li>• Provides monthly feedback to the contractor in the same manner and using the same performance measurements as the semi-annual AFEB</li> <li>• Process is standardized across all theaters Allows for maximum customer (supported unit) participation</li> <li>• Ensures there are no surprises at the AFEB</li> </ul> <p>LIMITATION: Requires active customer participation and a clear set of defined performance parameters. Also requires a fairly long TO period of performance (approximately 6-12 months or more).</p>

Table 22. Program Best Practices

#### D. COURSES OF ACTION

The three courses of action—Do Nothing, Create an Executive Lead Board, and Create a JCAP—were developed by the researchers in response to the thoughts and recommendations of informants. This list is inclusive of all the reasonable possibilities. Unreasonable alternatives such as “Disband the CAPs” were not considered because they

are simply not possible given the current all-volunteer structure of the U.S. military and the nature of the regions in which the military currently operates (i.e., immature areas in terms of the availability of Host Nation support and support resources). Details concerning each of the reasonable possibilities are provided in the following sections.

### **1. COA 1: Do Nothing—Leave Programs as They Are**

The easiest course of action is to do nothing. Simply leaving the programs as they are requires no change in processes, procedures, policies, or organizations, and causes no “ruffling” of the services’ “feathers.” The advantage to this alternative is that it is viable and easy—the programs currently function as required. The main disadvantage of leaving the programs as they are is that the DoD will not be able to capitalize on the many efficiencies and best practices that exist among the programs. In other words, each of the programs could benefit from *something* from another program—from better processes to a wider range of support capabilities. For instance, the LOGCAP could improve its requirements definition process by following the more standardized processes of the AFCAP or the GCCC/GCSC. Similarly, the AFCAP and the GCCC/GCSC could benefit from examining and implementing many of the performance evaluation processes that the LOGCAP uses. Furthermore, capability gaps that exist in one program can be filled by using another—provided that the customer knows how to request support from another service’s CAP. For example, heavy construction that is not allowable under the LOGCAP could be provided using AFCAP resources. By doing nothing, the logistical tail will remain splintered four ways and no contract administration processes will be streamlined or standardized.

Although doing nothing is easy, it is not necessarily cost effective. Why, in an increasingly joint environment, do we maintain four separate program offices that provide essentially the same support functions? Why do we put the time, effort, and tax dollars into four acquisition plans and source selections for each of the four program iterations when they are providing the same support functions and we know the potential savings involved in completing *just one* acquisition plan and source selection process is \$5.5M? Why do we maintain four separate program offices when we know that

combining the offices could potentially save \$1.45M in manpower costs per year, a total of \$14.5M over the life of one ten-year contract? These are questions that this course of action fails to address. Table 23 provides potential efficiencies and/or efficiencies foregone if this course of action is used.

<b>COA 1: Do Nothing—Leave the Programs as They Are Current Efficiencies / Efficiencies Foregone</b>		
	<u>Current Efficiencies</u>	<u>Efficiencies Foregone</u>
<b>1. Planning</b>	Each service is able to plan for their service-specific requirements without the extra effort associated with including other services' requirements/needs in the process. This efficiency benefits the individual service, but not the public interest (i.e., it is easier for the people doing the planning, but not necessarily more cost-effective or efficient for the taxpayer).	Fewer time-consuming Acquisition Planning and Source Selection Processes (potentially as few as one/decade when using one basic plus 9 option years contract under a JCAP).  Foregoing a potential Acquisition Planning and Source Selection time reduction of 173,700 hours, or \$5.5M per contract iteration.
	Does not require inter-service agreements on how (i.e., via JARB, via detailed SOW, via Work Order, etc.) or where (i.e., CONUS at the PEO or OCONUS at the CAO) new requirements will be handled.	Joint determination of requirements as planning for new requirements is done collectively at the sole joint program office (would require service agreement on how and where new requirements will be handled).
<b>2. Capabilities Provided</b>	Having more than one source available to fulfill a requirement (i.e., taking advantage of program capability overlaps).	Having all capabilities available to all services, zero capability gaps.  Reduced duplication of capabilities, zero capability overlaps.
	Only need to develop/maintain individual service performance standards for quality and timeliness – no need to take into consideration other services' standards.	More thorough and efficient administration, oversight, and performance measurement as performance standards for quality and timeliness are standardized.
<b>3. Financial Processes</b>	Ability to negotiate and maintain Labor Rates deemed realistic and appropriate for and individual service (i.e., no need to come to Labor Rate agreements with the other services).	Reduction of 216 MIPRs per year.  One set of standardized Labor Rates used for proposal reviews.
<b>4. Command and Control</b>	No need to change/modify current PEO structures to accommodate a joint program.  Able to maintain current program training processes.	One PEO with a total of 18 personnel; reduction of 19 PEO personnel, or the equivalent of \$1.45M savings per year.  Potentially more thorough administration due to standardized training processes, flattened learning curve, bigger pool of candidates from which to draw/match administrators, one face to the supported

COA 1: Do Nothing—Leave the Programs as They Are Current Efficiencies / Efficiencies Foregone		
		Commander
<b>5. Ease of Use</b>	No need to change current guidelines and procedures/processes for an individual program.	<p>One set of standardized guidelines and procedures/processes for the joint program. Standardization helps the strategic and operational planning process by showing Commanders what they can expect from their supporting contract/contractors.</p> <p>To increase effectiveness and efficiency, the best practices from each of the four programs could be implemented in the creation of a JCAP.</p>

Table 23. COA 1: Current Efficiencies / Efficiencies Foregone

## 2. COA 2: Create a CAP Executive Lead Board (CELB)

The second course of action is to create an executive lead board that serves to make the existing, independent CAPs act in a joint manner. For instance, an executive lead board would consist of leaders who are familiar with each of the CAPs—the capabilities they provide, how to request support, how to perform feedback, etc. When a new requirement arises, the supported command contacts the board (e.g., for a geographical area such as Northern Afghanistan, or Southern Afghanistan, or Kuwait, etc.), the board assesses what capabilities will be needed (e.g., basic support capabilities and no construction, or basic support capabilities and heavy construction, etc.) and then selects the best CAP or combination of CAPs to perform the mission. For instance, if any area required basic support capabilities for 25,000 troops as well as required many heavy construction projects, the board might recommend the LOGCAP for support and the AFCAP for construction. The requirements would be gathered and the necessary documentation (i.e., SOWs, performance criteria, etc.) presented to the LOGCAP and the AFCAP PMs for solicitation and bids from their multiple contractors. The estimate and bidding processes would proceed and the contractors would perform operations for the supported command. This process would be repeated for each new requirement.

Figure 4 provides a suggested organizational chart to show the reporting structure for new requirements. New requirements would flow from the supported units to the JARB in their geographic location. The CAP Executive Lead Board (CELB), which would serve as the interface between the programs and the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)), would be a member of the weekly or bi-weekly JARB via teleconference (which is the current method of JARB coordination between geographically dispersed units). The CELB would listen to the requirements and, with input from the CAP representatives in the region (i.e., the CAO Commander, the geographic contractor, etc.), and, if necessary, outside the area (i.e., the CAP PEO), determine which CAP is the most appropriate for each requirement. Once the decision is made, the customer works with the appropriate PEO and CAO to add their requirement to the selected CAP.

The CELB is also responsible for gathering and providing feedback regarding the programs to the USD (AT&L). Feedback includes everything from basic data calls for monthly expenditures and force support functions, to more encompassing matters such as assessing contractor performance and assessing administrative and oversight performance. For instance, the board will be required to assess the staffing of each program for proper oversight and administration. If additional administrative forces are needed, the CELB will work with USD (AT&L) to ensure proper staffing levels are met. The CELB will provide the programs and military services the necessary clout to ensure they receive adequate attention and support.

## CELB Suggested Organization Chart

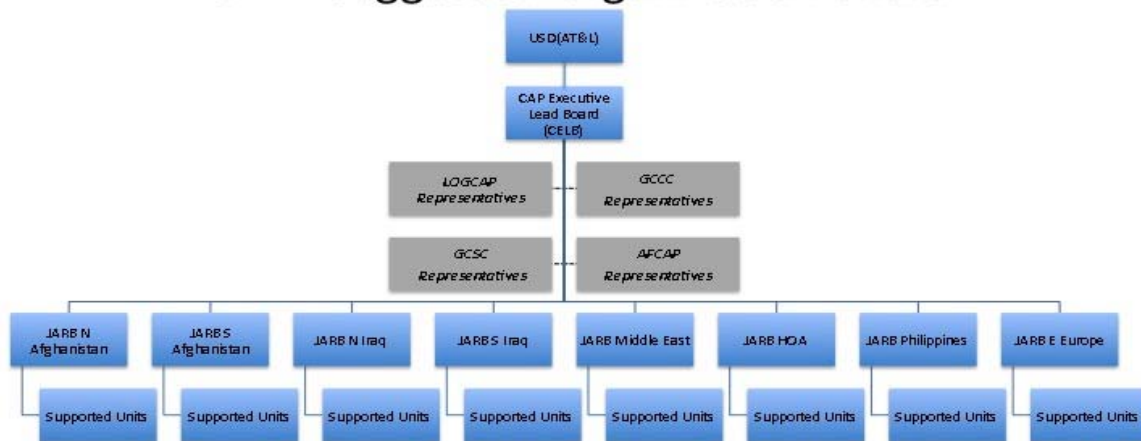


Figure 4. CAP EXECUTIVE LEADERSHIP BOARD (CELB) SUGGESTED ORGANIZATIONAL CHART

The advantage of this arrangement is that the services begin to work with and understand each other's CAP (i.e., increasing joint logistical operations), processes are standardized throughout all theaters of operation, and data is reported in a standard fashion making report compilation and data requests easier to fulfill (e.g., requests from the Office of the Secretary of Defense or Congress). Commanders are more aware and have better control over the contractors in the AO, financial processes can be streamlined, and requirement definitions and performance feedback can be standardized. As the customers use the programs and as the administrators administer them, they will become more familiar and easier to use. This course of action could serve as a stepping-stone to a full JCAP.

The disadvantage of this arrangement is that no duplicative costs—in maintaining separate program office personnel and in the overlap of capabilities provided—are eliminated. Each CAP will continue to operate its own PEO and rely on its own set of

CAO representatives. Additionally, no duplicative capabilities are eliminated in this alternative, and thus, the CAP logistical tail will continue to operate separately rather than in a streamlined, efficient approach. In other words, all the CAP contractors will still be vying for use of common transportation assets with no common prioritization mechanism. This is a large disadvantage when the contingency theater cannot support multiple logistical requests. This is currently the case in Afghanistan, where the lack of transportation infrastructure makes the logistical tail particularly difficult to manage. Finally, this process will likely drive the need for more MIPRs as the services exchange money for support. More MIPRs is not a show-stopper (since most informants agreed they are fairly easy to execute), but it is an additional consideration for this alternative. Table 24 provides potential efficiencies and/or efficiencies foregone if this course of action is used.

COA 2: Create a CAP Executive Lead Board (CELB) Current Efficiencies / Efficiencies Foregone		
	<u>Current Efficiencies</u>	<u>Efficiencies Foregone</u>
<b>1. Planning</b>	Each service is able to plan for their service-specific requirements without the extra effort associated with including other services' requirements/needs in the process. This efficiency benefits the individual service, but not the public interest (i.e., it is easier for the people doing the planning, but not necessarily more cost-effective or efficient for the taxpayer).	Fewer time-consuming Acquisition Planning and Source Selection Processes (potentially as few as one/decade when using one basic plus 9 option years contract using a JCAP).  Foregoing a potential Acquisition Planning and Source Selection time reduction of 173,700 hours, or \$5.5M per contract iteration.
	Does not require inter-service agreements on how (i.e., via JARB, via detailed SOW, via Work Order, etc.) or where (i.e., CONUS at the PEO or OCONUS at the CAO) new requirements will be handled.	Joint determination of requirements as planning for new requirements is done collectively at the sole joint program office (would require service agreement on how and where new requirements will be handled)
<b>2. Capabilities Provided</b>	Having more than one source available to fulfill a requirement (i.e., taking advantage of program capability overlaps).	Having all capabilities available to all services, zero capability gaps.  Reduced duplication of capabilities, zero capability overlaps.  More thorough and efficient administration, oversight, and performance measurement as performance standards for quality and timeliness are standardized.

<b>COA 2: Create a CAP Executive Lead Board (CELB)</b> <b>Current Efficiencies / Efficiencies Foregone</b>		
<b>3. Financial Processes</b>	<p>This COA will likely result in even more MIPRs than the 252 per year that currently exist.</p> <p>Ability to negotiate and maintain Labor Rates deemed realistic and appropriate for and individual service (i.e., no need to come to Labor Rate agreements with the other services).</p>	<p>Reduction of 216 MIPRs per year using a JCAP.</p> <p>One set of standardized Labor Rates used for proposal reviews.</p>
<b>4. Command and Control</b>	<p>No need to change/modify current PEO structures to accommodate a joint program.</p> <p>Able to maintain current program training processes.</p>	<p>One PEO with a total of 18 personnel; reduction of 19 PEO personnel, or the equivalent of \$1.45M savings per year.</p> <p>Potentially more thorough administration due to standardized training processes, flattened learning curve, bigger pool of candidates from which to draw/match administrators, one face to the supported Commander</p>
<b>5. Ease of Use</b>	<p>No need to change current guidelines and procedures/processes for an individual program.</p>	<p>One set of standardized guidelines and procedures/processes for the joint program. Standardization helps the strategic and operational planning process by showing Commanders what they can expect from their supporting contract/contractors.</p> <p>To increase effectiveness and efficiency, the best practices from each of the four programs could be implemented in the creation of a JCAP.</p>

Table 24. COA 2: Current Efficiencies / Efficiencies Foregone

### 3. COA 3: Create a JCAP

The third and final course of action is to create a JCAP. Creation of a JCAP would be closely followed by the transfer of existing and new requirements to the new program, and the winding down and eventual close-out of each of the four service-specific CAPs. The advantage of creating a JCAP is that the DoD will be able to capitalize on many of the efficiencies associated with having one, joint program. Acquisition planning and source selection could be performed by one office (vice four) and, pending acceptable contractor performance, only once per decade (assuming a one



basic plus nine option years contract). This would result in a saving of 173,700 manhours or the equivalent of \$5.5M per contract iteration.

Command and control of the program would take place in one (vice four) program office, a manpower savings of \$1.45M per year, or \$14.5M for the life of a ten-year contract. Furthermore, standardization of policies and practices would improve the efficiency of new requirements planning, program and contract administration, performance feedback, financial processes, and customer demand management and training. Cost efficiencies could be realized in the elimination of duplicative contract support capabilities such as those mentioned in Table 12 (e.g., food service operations, light construction, O&M, and power generation services) and in a coordinated supply chain/logistics system that encompasses the whole theater of operations.

Arguably, there would be less program and contract management mistakes (particularly OCONUS where the administrators rotate much more frequently than in CONUS) as the administrators become more familiar with the program and its associated contracts. The administrators would be able to build on their training and previous experience with each deployment; ultimately leading to fewer errors and/or more effective contract management and contractor oversight. Pooling the administration resources of all the services would provide CAO Commanders with the ability to place personnel in positions commensurate with their experience and abilities, which, again, could potentially reduce the number of administration errors and improve oversight.

The disadvantages of creating a JCAP are that it requires a lot of cooperation, hard work, and commitment from all of the services. Getting past the hurdles associated with service-specific requests and requirements will be no small task. The leaders assigned to take on this task must be committed to the joint concept. Furthermore, they must be able to separate service “wants” from service “needs.” Naturally, each service will want to maintain the level of capabilities and comforts they currently have with their individual program. However, they must be willing to compromise some of their “wants” to ensure the *needs* of all services are covered. Furthermore, bridging the gaps between each of the services’ cultures will require a significant amount of time to complete. Creating a JCAP will not be easy; however, the potential cost savings and

efficiencies make the effort worthwhile. Table 25 provides potential efficiencies and/or efficiencies foregone if this course of action is used.

<b>COA 3: Create a JCAP</b> <b>Efficiencies Gained / Efficiencies Foregone</b>		
	<u>Efficiencies Gained</u>	<u>Efficiencies Foregone</u>
<b>1. Planning</b>	Fewer time-consuming Acquisition Planning and Source Selection Processes (potentially as few as one/decade when using one basic plus 9 option years contract using a JCAP).  Potential Acquisition Planning and Source Selection time reduction of 173,700 hours, or \$5.5M per contract iteration.	None.
	Joint determination of requirements as planning for new requirements is done collectively at the sole joint program office (would require service agreement on how and where new requirements will be handled).	The ability for each service to plan for their own requirements without having to consult or come to agreements with the other services.
<b>2. Capabilities Provided</b>	Having all capabilities available to all services, zero capability gaps.  Reduced duplication of capabilities, zero capability overlaps.  More thorough and efficient administration, oversight, and performance measurement as performance standards for quality and timeliness are standardized.	Having more than one contractual source for a capability.
<b>3. Financial Processes</b>	Reduction of 216 MIPRs per year with a JCAP.  One set of standardized Labor Rates used for proposal reviews.	None.
<b>4. Command and Control</b>	One PEO with a total of 18 personnel; reduction of 19 PEO personnel, or the equivalent of \$1.45M savings per year.  Potentially more thorough administration due to standardized training processes, flattened learning curve, bigger pool of candidates from which to draw/match administrators, one face to the supported Commander	The ability of service-specific PEOs to control service-specific programs.
<b>5. Ease of Use</b>	One set of standardized guidelines and procedures/processes for the joint program. Standardization helps the	None.

COA 3: Create a JCAP Efficiencies Gained / Efficiencies Foregone		
	<p>strategic and operational planning process by showing Commanders what they can expect from their supporting contract/contractors.</p> <p>To increase effectiveness and efficiency, the best practices from each of the four programs could be implemented in the creation of a JCAP.</p>	

Table 25. COA 3: Efficiencies Gained / Efficiencies Foregone

## E. RECOMMENDATIONS

Based on the data provided in the Courses of Action, it may seem obvious that creating a JCAP is the best alternative for the Government in terms of cost savings and program efficiency and effectiveness. However, during the course of this study, the researchers realized there are several large cultural barriers that must be mitigated or overcome before the services will agree to share a CAP. These barriers were presented at the conclusion of each of the areas of efficiency in Chapter IV and are presented in Table 26.

<b>Cultural Barriers to JCAP Implementation</b>	
<b>1. Planning</b>	<p>Where the program can be used:</p> <ul style="list-style-type: none"> <li>• LOGCAP and AFCAP: In safe zones of openly hostile areas</li> <li>• GCCC/GCSC: Only outside openly hostile areas.</li> </ul> <p>How new requirements are added to the contract:</p> <ul style="list-style-type: none"> <li>• LOGCAP: By working hand-in-hand with the CAO and the contractor in theater</li> <li>• GCCC/GCSC and AFCAP: By working with the PEO using minimal contractor input.</li> </ul>
<b>2. Capabilities Provided</b>	<p>Loss of sole decision-making rights and overall program control as service-specific programs are replaced by a single JCAP.</p> <p>Developing a system to ensure equity of program use/ensuring all services' requirements are given priority and attention commensurate to their need.</p>
<b>3. Financial Processes</b>	No peculiar organizational culture considerations for Financial Processes.
<b>4. Command and Control</b>	<p>Complete Command and Control over service-specific programs (i.e., Army command of an Army program, Navy command of a Navy program, etc.) would be replaced by joint Command and Control.</p> <p>Performance standards for each capability must be developed and agreed upon by all services.</p> <p>The potential for the current members of each service-specific PEO (i.e., those with the inherent knowledge and skills to administer a CAP) to have to move to a new joint PEO location in order to remain in the CAP field.</p> <p>The requirement for each service to provide trained, prepared administrators to perform OCONUS program management (i.e., each service must provide OCONUS administrators vice allowing one or two services to shoulder the burden).</p>
<b>5. Ease of Use</b>	<p>Requires inter-service agreement on program policies, processes, guidance, and approval levels.</p> <p>How new TOs will be structured/awarded:</p> <ul style="list-style-type: none"> <li>• LOGCAP: Geographically/regionally</li> <li>• GCCC/GCSC and AFCAP: By task or requirement regardless of location</li> </ul>

Table 26. Cultural Barriers to JCAP Implementation

Short of the Secretary of Defense or Congress mandating that the services share a CAP, there are few reasons why the services would willingly join their logistical support programs. As mentioned, in the contingency environment (where these programs are most heavily used), funding or costs are generally not limiting factors. Accordingly, many commanders are willing to pay more to have the sole control of their services' logistical support program. Generally, commanders only willingly use another service's program when their own program is unavailable or unable to support their needs.

So how can the gap between cost savings/program effectiveness/efficiency and cultural differences between the services be bridged? The researchers recommend that the Secretary of Defense mandate the use of a JCAP and essentially coerce the services into bridging their cultural differences. *The ultimate goal is to develop and maintain a program that serves the interests and fulfills the contingency support requirements of all of the services while also serving the interest of the public by ensuring the program operates in a cost-effective and efficient manner.* The best way to meet that goal is to mandate a JCAP be formed, and the existing CAPs be rolled into the JCAP upon their expiration.

Should the cultural differences prove to be initially insurmountable, the researchers recommend take a two-step approach to creating a JCAP: (1) start the process by establishing a CELB that familiarizes the services with each other's program and allows the programs to be used in a joint manner. When the services mitigate or overcome their cultural barriers and begin to interoperate and act jointly, (2) create a JCAP. This two-step approach recognizes and accounts for the cultural differences that exist between the services while working toward the ultimate goal of creating a JCAP; however, it does little to improve efficiency in step (1), and may actually hinder current program efficiencies by adding a layer of bureaucracy/approvals. This is not the preferred method of implementation, but it may be necessary to bridge cultural gaps.

#### **F. JCAP IMPLEMENTATION PLAN**

Referring to the recommendation to mandate the use of a JCAP, an implementation plan is necessary to ensure the JCAP PEO is established and staffed properly and to ensure the transitions from individual CAPs to the JCAP are smooth. There are three steps necessary to transition to a JCAP:

1. Establish JCAP as a legitimate program and determine appropriate PEO staffing levels  
(Timeframe: N to N+1.5 years)
2. Perform Acquisition Planning and Source Selection Processes  
(Timeframe: N+1.5 year to N+3 years)
3. Transition individual CAPs into the JCAP  
(Timeframe: N+3 years to respective TO expiration dates)

The researchers recommend performing Step 1—Establishing a JCAP PEO—immediately to begin the staffing processes. The PEO could be headed by an Executive Lead Agency, such as appointing the current AFCAP office as the location for the new JCAP and relying largely on the knowledge and skills of current AFCAP personnel to collect input from the other PEOs as they define the requirements and begin the Acquisition Planning process. Or the PEO could be developed from scratch using personnel from all four individual CAP offices to begin the Acquisition Planning process. Note that this second option will likely require personnel to change stations, thus incurring costs associated with moving. The researchers recommend appointing an existing PEO to be the Executive Lead Agency for simplicity and cost purposes. As mentioned, a thorough workload analysis of the current CAPs should be performed to determine the appropriate staffing levels for the new JCAP PEO. Establishing JCAP as a legitimate program and determining the appropriate staffing levels is estimated to take approximately one and a half years—one year to establish the program and six months to perform a workload analysis to determine staffing requirements.

Step 2—Acquisition Planning (i.e., defining the requirements, developing an Acquisition Strategy, developing a SOW, crafting an RFP, etc.) and Source Selection—should begin immediately after the completion of Step 1, or approximately one and a half years after the start of the implementation process. Using the information contained in Table 8, the researchers estimate that it will take one and a half years to perform the Acquisition Planning and Source Selection processes (average duration presented in Table 8 is approximately 1.5 years). This process would not start until Step 1—Establish JCAP as a legitimate program and determine appropriate PEO staffing levels—is complete; therefore it would end approximately three years after the start of the implementation process.

The JCAP PEO should have a coordinated transition plan prior to sending out the RFP; therefore Step 3—Transition individual CAPs into the JCAP—should begin immediately after the completion of Step 2. The transition plan should be the JCAP PEO's best estimate of when the new JCAP contracts intend to be awarded and, knowing the point at which each current contract either expires or requires the exercise of an

option (see Table 27), details when and how each program will be folded into the JCAP. Transitions may be performed at the individual TO level (rather than at the ID/IQ contract level) as an intermediary step.

<b>Program Expiration Dates</b>			
<b><u>Program</u></b>	<b><u>Award Date</u></b>	<b><u>Award Years, Including Options</u></b>	<b><u>Expiration Date</u></b>
LOGCAP	17 Apr 2008	1 Basic + 9 Options	16 Apr 2018
GCCC	4 Aug 2006	1 Basic + 4 Options	3 Aug 2011
GCSC	30 Aug 2006	1 Basic + 4 Options	29 Aug 2011
AFCAP	8 Nov 2005	1 Basic + 9 Options	7 Nov 2015

Table 27. Program Expiration Dates

Implementation and transition will take several years to accomplish. The process will not be fast, however it should intentionally be very thorough. The magnitude and importance of the capabilities provided by each individual program requires that transitions occur methodically and in a systematic manner to ensure that no requirements go unmet during the process. While the process will undoubtedly be painful, the implementation of and transition to a JCAP will ultimately provide the contingency logistical support capabilities required by all the services in a single program that is effective and an efficient use of public resources.

## **G. STUDY LIMITATIONS**

The subjective nature of qualitative analysis is, indeed, a limitation. It is not an objective science, and it is, by its nature, incomplete. In other words, different researchers asking the same questions may arrive at different solutions due to variations in answers from informants and/or different valuations of the information received. As such, the reader should understand that the solutions provided by this study are the best approximations of the reasearchers. When possible, quantitative figures (i.e., costs based on time and labor rates) were used to support the analysis.

A convenience sample of respondents was used in this study. The researchers did not have enough time or resources available to randomly sample from the thousands of people who have played roles in the performance and use of these programs. Therefore, some doubt may be cast on the ability to generalize the findings herein to the entire population of CAP users and experiences.

Additionally, due to the highly competitive and sometimes political nature of these large support programs, the researchers were not able to garner any specific and research-relevant information from the contractors. The information received from the public affairs offices, while given with good intent, did not provide valuable insight into the specific areas of research addressed in this study. Therefore, the contractors' "voices" are silent in the data collected for this study.

Finally, the geographic- or regional-based approach used to estimate the FTE savings in Chapter IV "Command and Control" is a significant weakness of this study. As noted, a more thorough and more accurate approach is to estimate the staffing required for a JCAP by examining the quantity of work required (i.e., the number of TOs, the number of modifications, the number of audits performed, etc.) and the time required to perform each task. The resultant manhour assessment would provide a more accurate estimation of the number of personnel, or FTEs, necessary to administer the program.

## **H. AREAS FOR FURTHER RESEARCH**

This study analyzed five potential areas of efficiencies: (1) Planning, (2) Capabilities Provided, (3) Financial Processes, (4) Command and Control, and (5) Ease of Use. There are undoubtedly other potential areas of efficiency that could be studied. While quantitative methods were used where possible, there are other areas that could also be quantified if the researcher has access to, or can gather, the appropriate information. For instance, for Command and Control and Ease of Use, user and customer satisfaction surveys could be presented to a wide range of administrators and users to obtain their feedback.



One could also expand the study to include the number of auxiliary agencies that monitor and evaluate each of the programs (i.e., Defense Contract Audit Agency, Army Audit Agency, Naval Audit Service, Air Force Audit Agency, Defense Finance and Accounting Service, etc.) and the potential savings or efficiencies that could result from monitoring and evaluating one program vice four. Finally, the benefit of expert information and analysis cannot be overemphasized. While the researchers sought out and interviewed many program experts, there are several more out there that could provide valuable insight into the advantages and disadvantages of combining the four CAPs into a single JCAP. Getting experts together for a conference on the subject would be extremely beneficial as ideas could be presented and immediate feedback provided.

Another useful information-gathering tool might be the implementation and review of a joint database where all CAP representatives—the user, the administrators, those providing oversight, and the contractors—can input information and suggestions that are not screened by the chain of command. This sort of open, non-attribution forum might create new, innovative ways to use and administer these large logistical programs. These ideas are presented with the hope of making better decisions that represent the best interest of the Government and taxpayers.

Finally, a separate study could be performed to more accurately determine the number of PEO and CAO personnel necessary to administer the JCAP. Historical TO data (i.e., the number of TOs written and administered each year, the capabilities provided by each TO, the number of TO modifications performed, the number of troops supported, etc.) could be examined to determine the number of manhours of PEO and CAO administration that goes into each TO. From there, one could extrapolate the number of PEO personnel and CAO personnel necessary to properly administer JCAP TOs.

## **I. SUMMARY**

The idea to consolidate the individual, service-specific logistical support programs is not new. The 1997 GAO study, “Contingency Operations: Opportunities to Improve the Logistics Civil Augmentation Program,” first suggested that the services, the

Government, and the taxpayer might be better served by consolidating the efforts of the separate programs into one, joint program. Since then, studies performed by Dowling and Feck (1999) and Culkin (2004) have shown how a joint program could provide efficiency and streamlining benefits, particularly as they relate to Joint Publication 4-0 (2008) and the Joint Vision 2010 idea of “Focused Logistics.” This study takes the general concepts presented in each of these reports and builds on their logic by showing qualitatively (and, where possible, quantitatively) that it is indeed more cost-effective and efficient to have one JCAP vice four individual CAPs in five efficiency areas. This study relies on information garnered from actual program managers and administrators in addition to logistical and program regulations and policies, whereas the other studies are more conceptual and rely only on regulations and policies.

This study examined five potential efficiency areas—(1) Planning, (2) Capabilities Provided, (3) Financial Processes, (4) Command and Control, and (5) Ease of Use—using Cost-Effectiveness Analysis (CEA) to determine and, where possible, to quantify the potential cost savings and streamlining that might exist under a JCAP. The results show that significant cost savings will be realized by a JCAP, particularly in the area of Planning, which could save 173,700 manhours, or \$5.5M per program iteration. Beyond the monetary benefits, having one program would standardize and streamline Planning, Financial Processes, Command and Control functions. Standardization and streamlining would ultimately increase Ease of Use as both administrators and users become familiar with one set of program protocols. Finally, one program would eliminate duplicative capabilities, duplicative processes, and duplicative program management and program administration offices (valued at \$1.45M per year or \$14.5M over the life of a ten-year contract) while covering the capability gaps that currently exist in each program to ensure that all military services have the full range of support functions available for use.

The study then examines three courses of action—Do Nothing, Create a CAP Executive Lead Board (CELB), or Create a JCAP. The examination details the advantages, disadvantages, and cultural barriers/implications of each alternative. Finally, the recommendation is made to mandate the establishment of a JCAP. If cultural barriers

are deemed too significant or too difficult to overcome to immediately establish a JCAP, then the creation of a CELB is recommended to allow the individual programs and their administrators and users to function jointly before finally implementing a JCAP.

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## APPENDIX—INTERVIEW PROTOCOLS

<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO</u> <u>Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
<b>GENERAL QUESTIONS</b>						
Which CAP programs have you been associated with?	X	x	x	x	x	x
How long were you associated with each program?	X	x	x	x	x	x
What was your position/duties for each association?	X	x	x	x	x	x
How long have you performed duties in your function (overall, including outside the program)?	X	x	x	x	x	x
Is your experience with the program mainly CONUS/OCONUS/both? If both, how many years CONUS, how many years OCONUS?	X	x	x	x	x	x
What would be the benefits of combining all CAP contracts from your perspective?	X	x	x	x	x	x
In terms of manpower reductions?	X	x	x	x	x	x
In terms of process efficiencies?	X	x	x	x	x	x
What would be the costs of combining all CAP contracts from your perspective?	X	x	x	x	x	x

<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO</u> <u>Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
<b>PLANNING QUESTIONS</b>						
Did you experience any planning with the contractor? If yes, please describe your experience.	X	X	X	X	X	X
Please describe your acquisition strategy and contract award selection process?	X	X				
What were the evaluation factor for award and their relative importance?	X	X				
What is your role after delegation occurs?	X	X				
Please describe your relationship and interaction with the PCO.	X					
Please describe how a TO is let—who defines the requirements, who cuts the TO, who oversees the TO?	X	X				
Please describe your relationship and interaction with the PM.		X				
Do you find TO renegotiation easy or difficult? Would standardization of TOs make renegotiation easier, no change, or more difficult?		X	X			
Please describe your relationship and interaction with the PCO and PM.			X	X		

<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
Do you play a role in TO renegotiation? If so, do you find TO renegotiation easy or difficult? Would standardization of TOs make renegotiation easier, no change, or more difficult?				X	X	
Please describe your relationship and interaction with your ACO.					X	
From your perspective, what are the most difficult factors involved in planning? (e.g., the uncertainty of the requirement, working with a bureaucratic command structure, timeliness of involvement in the planning process?)						X
<b>CAPABILITIES PROVIDED QUESTIONS</b>						
How consistent do you think capabilities are rendered across TOs? Very consistently? Not very consistently?	X	X	X	X	X	X
Do you believe the current program does not meet, does meet, or exceeds the needs of the supported units? Please explain.	X	X	X	X	X	X
Do you feel there are any significant gaps in capabilities in your program? In other words, is there work that needs to be performed that cannot be performed because it is out of the contract's scope or	X	X	X	X	X	X

<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
outside the contractor's ability? Or do you feel the program is too big and should be more specialized?						
Do you feel the contractor(s) are capable of providing the proper level of support for all capabilities, or are there areas where they are stronger/weaker?	X	X	X	X	X	
Has your program ever not been able to meet the needs of another service or coalition partner? If unable to meet needs, why?	X	X	X	X	X	
How consistent do you think capabilities are rendered across TOs? Very consistently? Not very consistently?			X	X	X	X
On average, how would you rate the contractors performance? Do you have CPARs information that you can share with us?	X	X	X	X	X	
Do you feel there are any significant gaps in capabilities in your program? In other words, is there work that needs to be performed that cannot be performed because it is out of your scope or outside the your ability? Or do you feel the program is too big and should be more specialized?						

<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
Do you feel you are capable of providing the proper level of support for all capabilities, or are there areas where they are stronger/weaker?						
<b>FINANCIAL PROCESSES QUESTIONS</b>						
Do you believe the program is less costly than other options, about the right price for the capabilities provided, or more costly than other options? Please explain.	X	X	X	X	X	X
What do you believe could be done to help the program reduce costs?	X	X	X	X	X	X
What are the costs of the current CAP contracts?	X	X	X			
In terms of manpower?	X	X	X			
In terms of TO cost per ktr employee?	X	X	X			
Please describe your role in the award fee process.	X	X	X	X	X	
How often is your program under budget?	X	X	X	X		X
How often is your program over budget?	X	X	X	X		X
Do you ever need to request additional funding? If so, how often? Are the additional requests large or small relative to the overall cost of the TO?	X	X	X	X		X

<b><u>Question</u></b>	<b><u>PM</u></b>	<b><u>PCO</u></b>	<b><u>CAO Commander</u></b>	<b><u>ACO</u></b>	<b><u>QAR</u></b>	<b><u>Users/Customers</u></b>
Who determines what type of contract you use for TOs?		X	X	X		
Please describe any pay/funding problems you've experienced due to different services or coalition partners using your contract.			X	X		X
How are funds added to your contract?			X	X		X
<b>COMMAND AND CONTROL QUESTIONS</b>						
Do you believe there are inefficiencies in the use of CAP contracts? If yes, please describe any inefficiencies or complications you experienced.	X	X	X	X	X	X
Do you experience problems due to multiple contractors (different companies) working different parts of the same overall process?	X	X	X	X	X	X
Does your program support more than one service (Army, AF, Navy)? If yes, please describe any related inefficiencies or complications you experienced.	X	X	X	X	X	X
Does your program support coalition forces? If yes, please describe any related inefficiencies or complications you experienced.	X	X	X	X	X	X

<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
Please describe what you believe to be the biggest challenges your program currently faces.	X	X	X	X	X	X
Do you have a PM-Forward to assist units and your CAO in the field? If so, who?	X					
Do you feel he/she has the necessary qualifications to perform their duties ?	X					
Please describe your biggest command and control problems from both your point of view and from the point of view of the supported Commanders.	X	X	X	X	X	
Have you ever experienced problems with Commanders in the field who did not understand the concepts and rules/constraints of your program? If so, please explain.	X	X	X	X	X	
Do you have a PCO-Forward to assist units and your CAO in the field? If so, who? Do you feel he/she has the necessary qualifications to perform their duties?		X				
Are the delegations issued to the ACOs/QARs/PAs appropriate for their level of expertise and for the requirement on the ground?			X			



<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
Is your delegation issued by the PCO appropriate for your level of expertise and for your requirements on the ground?				X	X	
Do you experience problems due to multiple contractors (different companies) working different parts of the same overall process?			X	X	X	X
<b>EASE OF USE QUESTIONS</b>						
What do you believe could be done to make the program more efficient?	X	X	X	X	X	X
Would standardization of service/performance levels across the board help you perform your duties easier? If yes, how so? If not, why not?	X	X	X	X	X	X
Would standardization of service processes (i.e., less variance) across the board help you perform your duties easier? If yes, how so? If not, why not? If yes, how so? If not, why not?	X	X	X	X	X	X
After TO award, what changes occur most frequently? In other words, what issues are people calling you about?	X	X	X	X	X	
Please describe your role in requirement generation for TO award.	X	X	X	X		

<u>Question</u>	<u>PM</u>	<u>PCO</u>	<u>CAO</u> <u>Commander</u>	<u>ACO</u>	<u>QAR</u>	<u>Users/Customers</u>
Would you describe meeting the end user's need as more difficult with multiple contractors than having a single contractor? What is the nature of the difficulty?	X	X	X	X	X	
Do you keep a record of all problems or issues? If so, can we see it to read through the history?	X	X				
In your own words, what are the most difficult areas of getting a requirement added/turned on to your contract? How would you propose changing the process to make it easier?						X

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